

THE FOUNDATIONS OF ENVIRONMENTAL LAW

GOALS, OBJECTS, PRINCIPLES AND NORMS

TECHNICAL PAPER 1

APEEL



The Australian Panel of Experts
on Environmental Law

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About APEEL

The Australian Panel of Experts on Environmental Law (APEEL) is comprised of experts with extensive knowledge of, and experience in, environmental law. Its membership includes environmental law practitioners, academics with international standing and a retired judge of the Federal Court. APEEL has developed a blueprint for the next generation of Australian environmental laws with the aim of ensuring a healthy, functioning and resilient environment for generations to come. APEEL's proposals are for environmental laws that are as transparent, efficient, effective and participatory as possible. A series of technical discussion papers focus on the following themes:

1. The foundations of environmental law
2. Environmental governance
3. Terrestrial biodiversity conservation and natural resources management
4. Marine and coastal issues
5. Climate law
6. Energy regulation
7. The private sector, business law and environmental performance
8. Democracy and the environment

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Summary and Recommendations

Executive Summary

A new generation of environmental laws is needed to address the urgent and complex environmental challenges that Australia presently faces. APEEL believes that environmental law has evolved to the point where it is possible to build these new laws on a solid legal foundation that is largely lacking in the present system. APEEL suggests that the core components of this foundation are *goals, objectives, principles and norms*. These basic components must be clearly reflected in the design of the next generation of environmental legislation.

Specific recommendations include:

Part Two of this paper considers what should be the fundamental **goal** of environmental law, and suggests this should be derived from a broader societal goal. As well as analysing the evolution of Ecologically Sustainable Development (ESD) as such a goal and considering whether this concept has proved sufficiently effective in practice, this section of the paper identifies emerging trends and new approaches to the framing of such a goal.

RECOMMENDATION 1.1

The Commonwealth government initiate a wide-ranging, national consultative process for the purpose of building a substantial agreement on a new societal goal for Australia that would enhance or replace the current Ecologically Sustainable Development (ESD) goal contained in the National Strategy for Ecologically Sustainable Development (1992) (NSES), especially in light of the adoption by the United Nations in 2015 of the new Sustainable Development Goals (SDGs); and that it consider providing for the undertaking of this consultative process in its legislation.

Part Three of this paper examines the role of **objects** clauses in environmental legislation and concludes that many existing objects clauses are overly lengthy, ambiguous with respect to the significance to be attached to environmental matters and, at times, internally conflicting or inconsistent. APEEL recommends a more disciplined approach to the drafting of such clauses in the next generation of environmental laws.

RECOMMENDATION 1.2

Law-makers should adopt a more disciplined approach to the drafting of objects clauses in the next generation of Australian environmental legislation to ensure that they: (1) specify only the agreed societal goal for environmental law and some more specific objects applicable to the context of the particular legislation; (2) closely align these goal-related and context-specific objects statements; and (3) avoid the inclusion of principles of a 'directing' nature in such clauses.

Part Four of this paper identifies key **principles** of environmental law which can provide the appropriate guidance and direction with respect to both the design and implementation of the next generation of environmental laws. APEEL identifies two broad categories of principles: **design principles**, which law-makers should use when drafting future Australian environmental laws; and **directing principles**, which spell out matters that decision-makers are obliged to apply when exercising their statutory functions.

RECOMMENDATION 1.3

When designing the next generation of Australian environmental laws, law-makers should draft legislation that is consistent with, and gives effect to, the following ‘design-based’ principles:

- *Principles of smart regulation;*
- *Principles supporting the use of economic measures;*
- *Principles that endorse specific, widely-recognised regulatory tools and mechanisms; and*
- *Principles in support of environmental democracy;*

together with the following new principles which have not yet been widely recognised or adopted in Australia:

- *A principle of flexible and responsive environmental governance;*
- *A principle of environmental restoration; and*
- *A principle of non-regression.*

RECOMMENDATION 1.4

The precautionary principle and the prevention principle should be essential prescriptions in the next generation of Australian environmental laws, accompanied by provision for the engagement of the public in decision-making with respect to the level of risk and potential harm that is deemed acceptable.

RECOMMENDATION 1.5

The next generation of environmental laws should also prescribe the following, new directing principles concerning environmentally sustainable innovation (ESI):

- *A principle of achieving a high level of environment protection; and*
 - *A principle of applying the best available techniques (BAT).*
-

Part Five of this paper identifies the **norms** of environmental law, in the form of general environmental rights and duties, which APEEL suggests have evolved sufficiently to constitute an additional component of the foundations of environmental law. This paper refrains from a detailed examination of rights-based norms, given this topic is covered extensively in Australian Panel of Experts in Environmental Law, *Democracy and the Environment* (Technical Paper 8, 2017), but two specific types of general environmental duty are proposed: a duty of care to avoid causing environmental harm and a duty to repair and restore where environmental harm has been caused.

RECOMMENDATION 1.6

The next generation of environmental laws should routinely provide for a general environmental duty to be imposed on all persons (including those undertaking mining activities) to: (1) prevent or minimise environmental harm likely to arise from their activities; and (2) to repair environmental harm they have caused and to restore ecological functions that they have impaired, to the greatest extent practicable.

Table 1: SUMMARY OF THE FOUNDATIONS OF ENVIRONMENTAL LAW

<p>Fundamental goal for environmental law</p> <p>This must be derived from an overarching societal goal in relation to our environmental values and management of the environment. It needs to be developed through consultation and consensus building, involving reflection on the existing goal of ecologically sustainable development (ESD) and emerging, broader sustainability-based approaches.</p>	
<p>Objectives of environmental law</p> <p>Next generation laws should include concise and specific objectives that are designed to elaborate the broader societal goal/s, and the inclusion of a limited number of additional objectives that are fundamental to the specific subject-matter of the legislation involved.</p>	
<p>Design principles</p> <p>When designing future Australian environmental laws, law makers should design laws consistent with:</p> <ul style="list-style-type: none"> • ‘smart regulation’ principles (such as the <i>policy mix principle</i>, the <i>parsimony principle</i> and the <i>escalation principle</i>); • principles that promote particular economic measures, for example, that polluters pay for their environmental impacts; • principles that endorse particular tools or mechanisms for environmental management (for example, environmental impact assessment (EIA) - both project and strategic); • principles related to environmental democracy such as access to environmental information, public participation and access to justice; • a principle of responsive and flexible environmental governance; • a principle of environmental restoration; and • a principle of non-regression. 	<p>Directing principles</p> <p>Directing or <i>rules-based</i> principles that will be important to the next generation of environmental laws, include:</p> <ul style="list-style-type: none"> • the precautionary principle; • the prevention principle; and • principles for environmentally sustainable innovation (ESI): <ul style="list-style-type: none"> - a high level of environmental protection principle; and - a best available techniques principle (BAT).
<p>Rights-based norms</p> <p>(See Australian Panel of Experts in Environmental Law, <i>Democracy and the Environment</i> (Technical Paper 8, 2017).</p>	<p>Duties-based norms</p> <ul style="list-style-type: none"> • duty of care to avoid causing environmental harm and • duty to restore or rehabilitate.

Key questions for consideration when commenting on this *Technical Paper*:

- Should ESD remain the principal goal of Australian environmental law or is there a need to identify a revised or new societal goal for environmental management in Australia?
- Must this goal be determined by society in advance of its legal recognition (and if so, how) and/or does law have a role in shaping and advancing the recognition of such a goal and its related social values?
- Can the objects of Australia's environmental laws be improved in the next generation of environmental laws by the means suggested in this paper?
- Is the classification of principles advanced in this paper – into design and directing principles – a meaningful and useful method for identifying the purpose of specific environmental law principles?
- Are the principles identified in this paper those that are needed to underpin the next generation of environmental law? Are there other principles not mentioned in this paper that also should be recognised?
- Is the idea of prescribing general environmental duties worth pursuing?
- Do you believe that the goals, objects, principles and norms discussed in this paper could assist in resolving a current important environmental issue?

HOW TO CONTRIBUTE TO THE APEEL PROJECT

APEEL invites you to provide your responses to the ideas and recommendations presented in this paper. This will assist the development of our final proposals for the next generation of Australian environmental laws.

We look forward to your engagement on specific reform options as the APEEL journey progresses.

Please send your responses to: admin@apeel.org.au or go to www.apeel.org.au where you can do so online.

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Preamble

As this is the first in a series of eight APEEL *Technical Papers*, the opportunity is taken to present a brief introduction to the APEEL project in this preamble; how APEEL came to be established; and its broad mission - to develop a blueprint for the next generation of Australian environmental law. This preamble also outlines the approach APEEL has adopted to perform its mission.

APEEL's mission: a blueprint for the next generation of environmental laws¹

Environmental laws in Australia are the subject of regular scrutiny and debate. On the one hand, concerns to ensure efficiency and simplification of regulatory processes have given rise to proposals for streamlining and avoidance of duplication, reflected, for example, in the 'One Stop Shop' initiative of the Abbott Coalition government. On the other hand, there are frequent community calls for improvements to existing environmental laws and policies to more effectively address pressing challenges such as loss of biodiversity and climate change. The push and pull of these competing efficiency and reform objectives means that governments and stakeholders are constantly expending substantial energy on debate and deliberations concerning environmental law reform.

The Places You Love Alliance (PYL) is a network of over 40 leading environmental non-government organisations across Australia. It was established in 2013 to enable a broad cross-section of the environmental movement in this country to speak with one voice on environmental issues of critical importance. Its initial efforts were focused upon resisting the proposed delegation to the states of Commonwealth approvals powers under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (*EPBC Act*). However, PYL also identified at an early stage of its existence the need to progress from this essentially reactive agenda to develop a longer-term vision for Australia with respect to its future system of environmental laws. As a result, it decided to establish a project to develop a blueprint for the next generation of environmental laws, leading to the launch in November 2014 of the Australian Panel of Experts in Environmental Law (APEEL).

APEEL is comprised of 15 experts in environmental law, including academics, practising lawyers and a former Federal Court judge. Collectively it constitutes almost 400 years of knowledge and experience in this field. It is supported by a number of expert advisors who serve as reviewers of papers and provide general advice to APEEL. Whilst APEEL is provided logistical support by PYL to assist it in its deliberations, it is entirely independent of PYL in terms of the analysis and recommendations that it has developed in its *Technical Papers*. These papers have been developed by one or more APEEL member working together in various streams (see further below), then reviewed by the full Panel and one or more of its expert advisors, before finally being adopted by the full Panel as suitable for public release. Following a period of community consultation and engagement with key stakeholders concerning the ideas advanced in these *Technical Papers*, APEEL intends to release its final blueprint for the next generation of environmental laws by mid-2017.

The need for a new generation of environmental laws for Australia

Australia is one of the most ancient, naturally beautiful, and biodiverse places on Earth. It has 19 World Heritage properties, 65 Ramsar wetlands and more than one million species of plants and animals, many of which are found nowhere else on earth.² It is rich in some natural resources, whilst others such as water are scarce. It has unique natural and cultural heritage that underpins a sense of place and national identity and makes a positive contribution to the nation's wellbeing.³ Its current inhabitants are also the beneficiaries of over 50,000 years of caring for country by Aboriginal and Torres Strait Islander peoples.

¹ APEEL has taken up the task of presenting 'proposals for the next generation of environmental laws in Australia, focusing particularly at the federal level': see APEEL's Terms of Reference, available at www.a Peel.org.au.

² See State of the Environment 2011 Committee, *Australia State of the Environment 2011 – Independent report to the Australian Government Minister for Sustainability, Environment, Water, Population and Communities* (2011).

³ Commonwealth of Australia, *Australian Heritage Strategy* (2015).

A robust and world-leading system of environmental management is therefore vital to Australia's future. At the heart of that system, there is a need for laws enabling the preservation, management and restoration of our common heritage. There is a limit to what laws alone can achieve, but clear and effective laws are a crucial component for ensuring Australia sustains a healthy, resilient and productive environment.

For over 40 years, national environmental law has steadily evolved in Australia. The current legal framework has in part emerged incrementally in response to particular issues and developments, for instance, the mining of Fraser Island and the proposed damming of the Franklin River. It has also emerged in response to the development of international environmental laws and principles. Development of the existing framework has often involved a cooperative approach between federal, state, territory and local governments. There is no single source of environmental law, instead, a body of legislation, regulations, codes and policies (overlaid by international measures in the form of both 'soft' and 'hard' law) has evolved in an effort to address complex societal, conservation and resource use issues. At the Commonwealth level, there are over 70 different laws dealing with environmental issues,⁴ and there are countless more in each state and territory. An array of institutions, agencies and departments exist across federal, state, regional and local levels to administer and implement these various laws. And a diverse range of stakeholders and third parties interact with the current laws and institutions with varying degrees of influence.

Despite the number of laws, policies, agencies and engaged stakeholders, Australia's key environmental indicators continue to decline.⁵ There is also overwhelming evidence of environmental deterioration on a global scale that has prompted reference to the current circumstances as the 'Anthropocene' (or human-induced) period of mass extinctions and rapid ecological changes.⁶ Recent scientific research on global ecological trends appears to vindicate many of the dire predictions of the Club of Rome and other commentators made decades ago.⁷ Australia's environment has many, and generally worsening, problems as documented in successive *State of the Environment* reports commissioned at both the Commonwealth and state levels.⁸ Some of the persistent problems include major declines in biodiversity, degradation of productive rural land, the intensification of development along coastlines and in sprawling cities, and the emerging impacts of climate change. These problems are in addition to grave past damage that needs to be repaired, however possible. Australia has the worst rate of mammal extinctions of any country (30 species have perished in two centuries), and it has suffered severe deforestation.⁹ Scientists have ranked Australia ninth worst in the world for absolute environmental degradation.¹⁰

As a result, Australia now faces unprecedented environmental challenges. The sheer complexities of many ecological problems, especially those of a cumulative and incremental nature that gestate over long periods, are very difficult targets of legal regulation. Many environmental issues are transboundary and must be considered in the context of broader resilience, functionality and global tipping points.¹¹ Modern environmental law has enjoyed considerable early success in tackling the 'low hanging fruit', such as reducing point source emissions from large factories, but there are few such easy targets left. The subsequent generation of ecological problems that defy these early legal solutions include invasive species, marine plastic debris, looming resource scarcities, greenhouse gas emissions and climate change impacts more broadly.

Furthermore, whilst Australia's environmental laws may appear to look good on paper, they are not being effectively implemented to meet current goals and objectives. For example, environmental legal principles have been recognised in Commonwealth and state environmental legislation (see further below), but they have been under-utilised, are malleable in their interpretation due to their imprecise definition, and often are overridden by other considerations.

4 For a list of the relevant Commonwealth environmental legislation, see Australian Panel of Experts on Environmental Law, *Environmental Governance* (Technical Paper 2, 2017).

5 Ibid, and see also Places You Love Alliance, *The Australia We Love: A Report on Key Issues Affecting Nature and Society in Australia* (2014).

6 Will Steffen, Paul J Crutzen and John R McNeill, 'The Anthropocene: Are Humans Now Overwhelming the Great Forces of Nature' (2007) 36(8) *AMBIO* 614.

7 For example, Nafeez Ahmed, 'Scientists Vindicate "Limits to Growth" – Urge Investment in "Circular Economy"', *The Guardian* (online), 4 June 2014, <<http://www.theguardian.com/environment/earth-insight/2014/jun/04>>; and T Jackson and R Webster *Limits Revisited: A Review of the Limits to Growth Debate*, Report to the UK All-Party Parliamentary Group on Limits to Growth, April 2016 <<http://limits2growth.org.uk/revisited>>.

8 For the federal reports, see <<http://www.environment.gov.au/topics/science-and-research/state-environment-reporting>>.

9 See *State of the Environment Reports*, the most recent being 2011, available at <<http://www.environment.gov.au/topics/science-and-research/state-environment-reporting>>; See also Stephen Dovers (ed), *Australian Environmental History: Essays and Cases* (Oxford University Press, 1994).

10 Corey Bradshaw, Xingli Giam and Navjot Sodhi, 'Evaluating the Relative Environmental Impact of Countries' (2010) 5(5) *PLoS One* e10440.

11 Steffen et al, 'Planetary boundaries: Guiding human development on a changing planet' (2015) 347(6223) *Science* 736.

In addition, the value of environmental laws has been questioned in recent times, for example, as to whether they unduly infringe upon individual property rights,¹² unnecessarily delay economic development or represent an unreasonable regulatory burden.¹³ Although it is important to ensure environmental laws are efficient and not unduly cumbersome, the foregoing criticisms are frequently not evidence-based¹⁴ and fail to recognise the inherent *public purpose* benefits of environmental laws.

Given the increasingly urgent need to systematically, effectively and creatively address the current ecological challenges, now is the time to consider the direction of, and vision for, *strengthened* national environmental laws for the decades ahead. The APEEL project is developing a vision for a new generation of Australian environmental laws to ensure that Australia has a healthy, functioning and resilient environment which is of benefit to all Australians and, in doing so, it explores what those laws might look like.

Some preliminary observations on the definition and role of environmental law

In its initial discussions concerning how best to approach this challenging task, APEEL recognised that it would be necessary not only to build on existing legal approaches, but also to think beyond them in order to develop a visionary blueprint for the future. As a starting point, APEEL offers some preliminary observations concerning the definition of environmental law and its fundamental role and purpose.

How is environmental law to be defined?

The subject of ‘environmental law’ defies any simple definition, for several reasons.¹⁵ Environmental issues are both physically and socially complex, and therefore it may sometimes be unclear when an ‘environmental issue’ comes within the purview of this area of law. Also, there is a diverse assortment of laws that can have an influence concerning environmental problems, both domestically and internationally, much of which ostensibly may not seem to have anything to do with the environment, such as taxation law or corporate law. These areas are discussed in detail in Australian Panel of Experts on Environmental Law, *The Private Sector, Business Law and Environmental Performance* (Technical Paper 7, 2017).

APEEL also recognises that environmental law in Australia has been built on legal traditions and precedents that were, and perhaps remain, much less sympathetic to environmental stewardship. For instance, the common law rules relating to property law and tort law tend to privilege the rights of landholders to use and exploit their property as they wish, and to limit access to remedies for damage to land to land-holders.¹⁶ Whilst there is continuing debate concerning the extent to which it is appropriate for these traditional common law privileges to be overridden by the extensive range of legislation designed to address environmental issues,¹⁷ there is no serious dispute concerning the need for environmental legislation to place constraints on how landholders make use of their land for the greater public benefit.¹⁸

¹² See Australian Law Reform Commission, *Traditional Rights and Freedoms—Encroachments by Commonwealth Laws*, Interim Report No 127 (2015).

¹³ For example, see the Commonwealth Government’s ‘one stop shop’ proposal to streamline environmental approvals by using bilateral agreements: Department of the Environment and Energy (Cth), *One Stop Shop for environmental approvals* <<http://www.environment.gov.au/epbc/one-stop-shop>>.

¹⁴ For example, tightened environmental policies have been found to have little effect on aggregate productivity: see S Albrizio et al, ‘Do Environmental Policies Matter for Productivity Growth? Insights from New Cross-Country Measures of Environmental Policies’ (OECD Economics Department Working Papers No 1176, OECD, 2014) <<http://dx.doi.org/10.1787/5f6c9c9c9c9c9c9c>>.

¹⁵ Elizabeth Fisher, Bettina Lange and Eloise Scotford, *Environmental Law: Text, Cases and Materials* (Oxford University Press, 2013) 5-20.

¹⁶ John Lowry and Rod Edmunds (eds), *Environmental Protection and the Common Law* (Hart Publishing, 2000).

¹⁷ See for example, Australian Law Reform Commission, *Traditional Rights and Freedoms—Encroachments by Commonwealth Laws*, Issues Paper No 46 (2014), ch 6 – Property Rights; Australian Law Reform Commission, *Traditional Rights and Freedoms—Encroachments by Commonwealth Laws*, Final Report 129 (2015) <<http://www.alrc.gov.au/inquiries/freedoms>>.

¹⁸ The relationship between public interest and private property is discussed further in Australian Panel of Experts on Environmental Law, *Terrestrial Biodiversity Conservation and Natural Resources Management Governance* (Technical Paper 3, 2017).

APEEL does not seek to offer a simple, all-embracing definition of environmental law, but recognises that there are clearly discernible ‘branches’ of this field of law that enjoy widespread recognition amongst lawyers and others alike. These include laws that provide for:

- the planning of future land-use and the assessment and approval of proposed specific uses of land and water;
- the protection of environmental quality (air, water, land and noise) and the management of solid and hazardous (including nuclear) wastes;
- the management of health and ecological risks associated with a vast array of chemical substances and technologies (including biotechnologies);
- the protection of natural systems (biodiversity) and built and cultural (including indigenous) heritage;
- the management of natural resources (land, water, fisheries forests, minerals, and oil and gas (including ‘unconventional’ gas)); and more recently
- mitigation and adaptation measures in relation to climate change, including laws that promote energy conservation and renewable energy.

APEEL recognises also that there will often be different versions of some of the abovementioned types of laws for the terrestrial and marine contexts respectively.¹⁹

What is the role of environmental law?

Law is indispensable to the protection and management of the natural environment. APEEL sees environmental law as serving the following main purposes:

- it establishes the rights and responsibilities of governments and other key stakeholders in respect of the environment;
- it contributes to **human** well-being by ensuring that natural resources such as forests, biodiversity, soil, water and wildlife are used sustainably and thereby can continue to support economic development and meet social needs indefinitely (all Australians depend upon, and benefit from, clean air, clean water, healthy functioning ecosystems and resilient landscapes);
- it safeguards nature’s intrinsic values, independent of their utility to humankind, by protecting biodiversity and maintaining nature’s life cycles and evolutionary processes;
- it protects important attributes of Australia’s cultural heritage, history and national character;²⁰ and
- it allows individuals and communities to be involved in decisions that affect their environment, thereby contributing to the wider goal of democratising environmental management.

¹⁹ Australian Panel of Experts on Environmental Law, *Terrestrial Biodiversity Conservation and Natural Resources Management Governance* (Technical Paper 3, 2017) and *Marine and Coastal Issues* (Technical Paper 4, 2017), critique current laws relating to biodiversity conservation and natural resource management in both the terrestrial and marine/coastal contexts respectively and make recommendations for reform in each context.

²⁰ Australia’s identity is intimately connected to the country’s natural environment, as symbolised by the fauna depicted on the Commonwealth coat of arms and its currency. For indigenous Australians, the natural environment is integral to their cultural identity. Environmental law plays a crucial role in protecting the wildlife and iconic landscapes that shape Australia’s cultural heritage.

How APEEL is approaching its task

Contemporary analyses of environmental law generally focus on the examination of administrative authorities and tools, that is, the structural arrangements for administration and enforcement of environmental legislation and the mechanisms (regulatory, market-based and voluntary) created by such legislation to deliver environmental outcomes. APEEL concluded that this type of analysis frequently fails to recognise deeper problems with the current nature of environmental law, in particular, that it is generally fragmented and uncoordinated and that its implementation is often far from effective. As a result, APEEL decided to approach its task by establishing six work streams that enable a more holistic approach to be adopted.

This project cannot hope to comprehensively examine in detail all of the various branches of environmental laws across the Commonwealth, states and territories that are described above. Instead, APEEL has focused its efforts on some broader, conceptual aspects of environmental law and then examines selected branches of environmental law in more detail. From the **conceptual** perspective, APEEL has identified three areas for attention:

- **Stream 1** (which is responsible for this *Technical Paper*), examines the *foundations of environmental law*, which may be categorised as comprising goals, objects, principles and norms;
- **Stream 2** examines the subject of *environmental governance*, looking particularly at how roles and responsibilities should be allocated across multiple layers of government within the Australian federal constitutional system; and
- **Stream 6** examines the subject of *environmental democracy* considering, in particular, the possible substantive and procedural rights that can contribute to better environmental outcomes and reinforce the operation of environmental law.

APEEL have also addressed **particular branches of environmental law** that warrant more detailed attention due to their significance and the potential to draw wider conclusions concerning the need for reform from their examination:

- **Stream 3** examines laws related to the *protection of biodiversity and natural resources management*, with *Technical Papers* covering respectively the terrestrial and marine contexts; and
- **Stream 4** examines, via separate *Technical Papers*, the laws related to *climate change and energy regulation*.

Stream 5 examines ‘other’ laws relating to *business regulation*, as well as voluntary private sector initiatives, that fall outside the abovementioned ‘branches’ of environmental law, but which the Panel believes can indirectly exert a profound impact on environmental outcomes. This aspect of APEEL’s work adds a significant dimension that has been largely overlooked in most discussions concerning environmental law reform.

Whilst APEEL has made some minor adjustments within these Streams during the course of the project, they have served as suitable parameters in terms of providing the right framework for the Panel’s endeavours. As the eight *Technical Papers* emanating from these Streams have been produced largely in parallel, it is inevitable that there may be some inconsistencies or gaps resulting, and also that cross-referencing between the papers is somewhat limited. Shortcomings such as this will be addressed after undertaking a period of consultation and engagement and before the papers are finalised. It is APEEL’s intention to release the final proposals for the next generation of Australian environmental laws by mid-2017.

1. Introduction

1.1 How is the first Stream approaching its task?

The first Stream established by APEEL was tasked to identify and describe the core principles that underpin environmental law, an exercise that has rarely been attempted in the literature of environmental law.²¹ This assignment was the result of the recognition by APEEL that there might be a number of ‘core’ principles that are pertinent to environmental law and which could provide a sound basis or ‘foundation’ for the design of the next generation of environmental laws.

In undertaking this task, this Stream recognised at an early stage of its deliberations that it was not sufficient to describe the foundations of environmental law simply in terms of ‘principles’. Instead, it has developed a more nuanced analysis of the foundations of environmental law that distinguishes between goals, objectives, principles and norms. It finds that these several elements, when combined together, provide a sound, underlying basis or ‘foundation’ for environmental law, upon which can then be constructed the usual measures concerning the creation of administrative authorities and appropriate mechanisms and tools for environmental management.

Whilst this conceptual analysis may initially appear abstract and complex, APEEL has found it serves to separate out and distinguish between several critical foundational elements of environmental law that each have a distinct purpose, thereby enabling them to be more effectively provided for in the next generation of environmental law. Indeed, APEEL has found that the approach as proposed for the identification and analysis of the foundations of environmental law, is applicable to the envisioning of a future generation of environmental laws anywhere in the world. Whilst the design details may vary to accommodate particular legal, cultural, social and environmental considerations, the broad anatomy presented in this paper is essentially universal in character and applicable within any jurisdiction.

To introduce these distinct, foundational elements of environmental law, a set of definitions describing their respective purpose and function is offered below.

²¹ However, APEEL notes the important work by Douglas Fisher, *Australian Environmental Law: Norms, Principles and Rules* (Law Book Company, 2014).

1.2 Definitions

In this paper, the term '**societal goal**' is used to describe an aim or end result that has been agreed (or proposed) through a widely consultative process as desirable, in order to overcome the joint challenges of poverty and environmental degradation (including their social and economic contexts). This could be framed around sustainable development or another concept such as a broader notion of sustainability. This goal is not a legal concept of itself, but it may be recognised and endorsed through law.²²

The term '**object**' is used in this paper to describe an aim or outcome that is attributed to specific environmental legislation, normally by way of the inclusion in an 'objects' clause in such legislation. In Australian environmental legislation, objects clauses are quite common and often explicitly identify the societal goal of ESD as a core objective (although it may be framed in different ways).

There are many different definitions of the term '**principle**', but most have in common the idea of a fundamental truth, belief or proposition that explains or directs how something happens or works. A more specific definition refers to a legal rule that should be followed as a matter of good behaviour. Both forms of definition have relevance to the identification of the core principles of environmental law; the former encompassing principles that are external to legislation, but serve to guide its design (for example, the principles of smart regulation); the latter involving 'directing' (rules-based) principles embodied within environmental legislation that are to be applied in its implementation (for example, the precautionary principle).

Whilst the term '**legal norm**', similar to legal 'principle', is widely used to describe various forms of legal rules (and both terms may be used interchangeably), the term is used in this paper to describe a default rule of behaviour with respect to the environment that is cast in the form of either a general right or duty. Such normative rules may be prescribed in environmental legislation, but are now commonly found also in national constitutions.

²² See discussion of this question, below n 29.

2. Goals for environmental law²³

2.1 Overview

Over the past half century, environmental legislation in Australia has undoubtedly improved the quality of environmental decision-making and reduced what would otherwise have been a much direr situation if left unregulated. However, the continuing negative trajectory of key ecological indicators suggests that whilst current legal approaches are occasionally winning important battles, these efforts are still losing the war. Important successes such as phasing out ozone depleting chemicals and lead in petrol may deflect attention away from the cumulative decline in ecological services and biodiversity. The underlying drivers of environmental decline - primarily population growth, economic growth, consumption patterns and technological change - remain largely unconstrained. These circumstances require Australia, alongside other countries, to re-evaluate its goals with respect to its economy, society and the environment.

There have been attempts to stem this decline in recent years on a global basis, in particular through the adoption of the concept of sustainable development. These efforts have been reinforced by the adoption, in late 2015, of the United Nations *Sustainable Development Goals (SDGs)* as a successor to the *Millennium Development Goals (MDGs)*.²⁴ In Australia, there has been a long-standing acknowledgement of the goal of ESD, dating back to the *National Strategy for Ecologically Sustainable Development (1992) (NSES)*.²⁵

²³ It is better to speak of goals 'for' environmental law or, in other words, goals that environmental law may be used to help achieve, rather than the goals 'of' environmental law. What is involved here is a broader concept that reflects a commonly shared aspiration within human society, or particular sections thereof, which in turn may be reflected in environmental law.

²⁴ See United Nations, *Sustainable Development Goals* <<https://sustainabledevelopment.un.org/topics/sustainabledevelopmentgoals>>.

²⁵ See Department of Environment and Energy (Cth), *National Strategy for Ecologically Sustainable Development* <<http://www.environment.gov.au/about-us/esd/publications/national-esd-strategy>>.

BOX 1: EXTRACT FROM THE NSESD

Australia's goal, core objectives and guiding principles for the National ESD Strategy

The Goal is:

Development that improves the total quality of life, both now and in the future, in a way that maintains the ecological processes on which life depends.

The Core Objectives are:

- *to enhance individual and community well-being and welfare by following a path of economic development that safeguards the welfare of future generations;*
- *to provide for equity within and between generations;*
- *to protect biological diversity and maintain essential ecological processes and life-support systems.*

The Guiding Principles are:²⁶

- *decision making processes should effectively integrate both long and short-term economic, environmental, social and equity considerations;*
- *where there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation;*
- *the global dimension of environmental impacts of actions and policies should be recognised and considered;*
- *the need to develop a strong, growing and diversified economy which can enhance the capacity for environmental protection should be recognised;*
- *the need to maintain and enhance international competitiveness in an environmentally sound manner should be recognised;*
- *cost effective and flexible policy instruments should be adopted, such as improved valuation, pricing and incentive mechanisms; and*
- *decisions and actions should provide for broad community involvement on issues which affect them.*

*These guiding principles and core objectives need to be considered as a package. No objective or principle should predominate over the others. **A balanced approach is required** that takes into account all these objectives and principles to pursue the goal of ESD. (emphasis added)*

²⁶ APEEL notes that the EPBC Act s 3A also sets out five 'principles of ecologically sustainable development', of which only three correspond to those presented in NSESD Guiding Principles (integration, precaution and economic mechanisms); the other two principles concern inter-generational equity and conservation of biological diversity and ecological integrity. The differences between these respective prescriptions of ESD principles reflect the fact that the latter are intended specifically to guide decision-making under the EPBC Act, whereas the former have a broader, governmental strategy and policy focus. See further below, Part 4, for a detailed discussion of environmental law principles.

APEEL is firmly of the view that any attempt to develop a blueprint for the next generation of environmental laws should have as part of its foundation the endorsement of an appropriate societal goal that informs and drives the design of such laws. Such a goal provides a solid basis for environmental law at the foundational level. It is to be distinguished from legal principles, which may elaborate or assist to give effect to the societal goal, but which cannot by themselves fully articulate that goal.²⁷

Implementation of this societal goal will also require multiple strategies and approaches, of which law (including legislation) is just one. Recognition of both the capacities and the limitations of law in this context is critical to achieving successful outcomes and to avoiding misplaced and excessive faith in the role of law. Laws may look good on paper, but will not achieve the goals or objectives that they endorse if they are not implemented effectively.²⁸ This requires, amongst other things, administering agencies to be fully resourced to implement laws on the ground and for the general public to have access to the courts to uphold environmental law if governments fail to act. These matters are addressed more fully in Australian Panel of Experts on Environmental Law, *Environmental Governance* (Technical Paper 2, 2017) and Australian Panel of Experts in Environmental Law, *Democracy and the Environment* (Technical Paper 8, 2017).

Given the diversity of perspectives on the nature of a fundamental societal goal for the future of human civilisation, APEEL believes it is unwise for it to assume a definitive position on this matter. APEEL acknowledges that societal goals for environmental law are a reflection of the underlying values of society, and that, because we inhabit morally pluralistic societies, there may never be full agreement on such goals. The chosen goal(s) may simply reflect the political influence of those groups in society whose values prevail over rival values. However, an important role for law is to try to create a level playing field (for example, through democratic institutions and the operation of the rule of law) for the choice and expression of these societal goals.

The assertion by some environmental law scholars about the need for a new 'ethical' approach to environmental law²⁹ (for example, based on recognition of the intrinsic rights of nature) is a response to other societal perspectives on environmental goals that involve different underlying values or norms about desirable behaviour or outcomes. For instance, the preference some give to economic growth or poverty alleviation reflects different values and imperatives related to the perceived contribution that economic development can make to the lifting of living standards. Such diversity in our ethical values does not mean that all perspectives should be treated equally and given effect simultaneously. But acknowledging the existence of different ethical perspectives is essential for informed public debate and the democratic development of societal goals for environmental law. Besides these differing perspectives, there is also a fundamental question about the relationship between law and society and whether and how the legal system can shape social values or whether society itself must first change to some degree before the law can give effect to its evolving values.

In order to assess how a societal goal might be developed for the next generation of environmental laws, it is useful to briefly map the evolution in the dominant ideas that have shaped environmental policy and governance in Australia and the western world in the post-War era. In general, APEEL suggests that the goals and values that address the interplay of environmental protection and economic development have evolved in four discernible stages.

27 There is a body of opinion amongst some environmental law commentators that sustainable development is, of itself, a rule-based, legal principle. This idea is particularly prominent in international environmental law, where some support is provided by decisions of the International Court of Justice and through a growing legal recognition of sustainable development by states. For a convincing rejection of this perspective, see M Cordonnier Segger, 'Sustainable Development in International Law' in H C Bugge and C Voigt (eds), *Sustainable Development in International and National Environmental Law* (Europa Law Publishing, 2008) 87, at 142, where, after an extensive survey of the normative character of sustainable development in international law, the following conclusion is offered: 'A search for one agreed customary norm of sustainable development might actually be a search in the wrong direction. One further possibility is that sustainable development could be characterised as an objective of states, and even as an internationally recognised policy objective of the world...It does not preclude the existence of further (more specific or normative) international principles of law related to sustainable development'. APEEL strongly shares this view, particularly in relation to domestic, as distinct from, international law, and accordingly has adopted the position outlined in this section of this report that sustainable development should be regarded as a goal that is external to environmental law, rather than an internal principle of a rule-based nature. APEEL is reinforced in adopting this position by the view that the term 'sustainable development' has insufficient legal certainty to guarantee appropriate standards and procedures for environmental protection (see further in discussion below).

28 See for example, *Assessment of the adequacy of threatened species and planning laws*, (September 2014) <<http://www.placesyoulove.org/>>. **A key finding of this report, that was commissioned by the PYL Alliance and prepared by the Environmental Defenders Offices of Australia, was that existing threatened species and planning laws contained useful provisions and mechanisms, but were not being effectively implemented, resourced or administered.**

29 See for example, Klaus Bosselmann, 'A Legal Framework for Sustainable Development' in K Bosselmann and D Grinlinton (eds), *Environmental Law for a Sustainable Society* (New Zealand Centre for Environmental Law, 2002) 145, 149.

Phase 1 – The goal of enclave conservation

Before the 1970s, an ‘enclave’ view of environmental management prevailed and was guided by the philosophy of ‘conservation’ which arose in the late 19th century. Here, the main goal was to create environmental sanctuaries and parks, to be set aside in designated spaces within which all conservation goals could be met while freeing the remaining, and much larger, areas for economic development and human settlement.³⁰ This conservation ideal remains an important theme of contemporary environmental governance, but it remains largely confined to biodiversity protection rather than informing the overarching framework for environmental management. From the mid to late 1960’s, it became apparent that ‘enclaves’ would be insufficient not only to achieve biodiversity conservation, but also to attain many other environmental objectives such as pollution control and managing the ecological impacts of industrial chemicals, thanks to an increased recognition of the dynamic and interconnected nature of ecosystems and the impacts of human activity upon them.

Phase 2- the emergence of environmental protection laws

During the 1970s, a new wave of environmental protection laws swept across the western world in particular, which pitched the protection of environmental quality (air, land and water) in a direct contest with economic development. These laws addressed problems such as air, land and water quality, waste management and hazardous substances and also established new processes of environmental impact assessment (EIA) and environmental permitting.

This new wave of serious concern about environmental issues was captured eloquently in the 1972 *Stockholm Declaration on the Human Environment*. However, a tension had emerged by the 1980’s between economic growth/development and environmental protection. At the same time, the international community was continuing to explore the parallel challenge of addressing poverty and economic inequality on a global scale.³¹

Phase 3 – The goal of ecologically sustainable development

In an effort to reconcile these seemingly competitive objectives, the World Commission on Environment and Development (the ‘Brundtland Commission’) was established by the United Nations (UN). The Brundtland Commission, after a lengthy global enquiry, espoused the concept of **sustainable development** in its 1987 report, *Our Common Future*.³² This concept has been widely promoted as a means of reconciling economic, environmental and social objectives, and it has found clear recognition in Australia - as *ecologically* sustainable development - in the *NESD* and the *Intergovernmental Agreement on the Environment 1992 (IGAE)*. This in turn has led to a widespread practice on the part of both federal and state/territory governments of endorsing the concept of ESD as a fundamental objective of particular environmental legislation.³³

This trend has been reinforced by international treaties and other international instruments which have also directly influenced many Australian environmental laws and thereby informed their goals. Australia is a party to scores of multilateral and bilateral environmental treaties that not only prescribe specific obligations for implementation through its domestic laws, but also help articulate the overarching goals of the environmental law system, in particular, with respect to sustainable development and nature conservation.³⁴ In addition, so-called ‘soft law’ international measures such as the 1992 United Nations *Rio Declaration on Environment and Development* have specifically endorsed the goal of sustainable development and elaborated its content in the form of specific principles such as

30 Discussed in Joseph Sax, ‘The New Age of Environmental Restoration’ (2001) 41 *Washburn Law Journal* 1.

31 See Johanna Sutherland, ‘An Endangered Planet?’ in G Fry and J O’Hagan (eds), *Contending Images of World Politics* (MacMillan, 2000) 181.

32 World Commission on Environment and Development, *Our Common Future: Report of the World Commission on Environment and Development* (Oxford University Press, 1987).

33 Gerry Bates, *Environmental Law in Australia* (LexisNexis, 8th ed, 2013). See for example, the *EPBC Act* s 1(b), which provides that the objective of the *EPBC Act* is ‘to promote ecologically sustainable development through the conservation and ecologically sustainable use of natural resources’.

34 Among the most significant treaties which the Australian Government has the responsibility and power to implement via the external affairs power of the *Constitution* (s 51(xxix)) are: the *Convention Concerning the Protection of the World Natural and Cultural Heritage* (1972); *Convention on International Trade in Endangered Species of Wild Fauna and Flora* (1973); *UN Law of the Sea Convention* (1982); the *UN Framework Convention on Climate Change* (1992); *Convention on Biological Diversity* (1992); and the *Stockholm Convention on Persistent Organic Pollutants* (2001). Sustainable development and nature conservation are frequently stated goals of these treaties; for example, the *Convention on Biological Diversity* obliges its parties to promote ‘the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources’ (see *Convention on Biological Diversity*, opened for signature 5 June 1992, 1760 UNTS 79 (entered into force 29 December 1993, art 1)).

the precautionary principle. It is suggested therefore that, at both the international level and in Australia, the goal of sustainable development and related ideals have been consistently identified as a basis or foundation for the operation of environmental law.

Phase 4 – Beyond Sustainable Development - Emerging Alternatives

In the past two decades since the 1992 Rio Conference, which was the pinnacle of the movement to adopt sustainable development as a foundational goal for environmental law, there has been growing scepticism about the adequacy of the sustainable development agenda. A variety of reasons have been offered, including that: vested interests have been unwilling to forego economic development opportunities; the difficulty of translating the *SDGs* into workable environmental laws; and, crucially, its lack of success, given scientific evidence of worsening environmental conditions. At its core, sustainable development has struggled to deal with two particular issues: how to manage the trade-offs that must inevitably arise in the course of reconciling economic, environmental and social values; and how to deal with both policy and decision-making in situations where there is significant scientific uncertainty about possible outcomes. There have been two broad forms of response to these and other criticisms of the original *SDG*: first, efforts to expand and further refine this concept in order to strive for its more effective implementation; and second, the development of an alternative paradigm based on the concept of ‘sustainability’.

The UN has led the international effort to further develop the sustainable development concept, whilst simultaneously addressing the need for poverty alleviation, through the adoption in 2015 of the *SDGs* and the *2030 Agenda for Sustainable Development*,³⁵ which incorporates new financing mechanisms that may encompass other axiomatic considerations concerning global financial systems and economic inequality/poverty.³⁶ A key feature of the *SDGs* and the accompanying *2030 Agenda for Sustainable Development* is their reliance on ‘bottom up’ implementation through the adoption by countries of their own targets, strategies and reporting mechanisms. This will require countries, including Australia, to put in place the required laws, policies and institutional arrangements to ensure attainment of their declared targets.

³⁵ *Transforming Our World: the 2030 Agenda for Sustainable Development* GA Res 70/1, UN GAOR, 70th session, Agenda Items 15 and 16, UN Doc A/Res/70/1 (21 October 2015).

³⁶ See United Nations, *Sustainable Development Goals* <<https://sustainabledevelopment.un.org/topics/sustainabledevelopmentgoals>>.

BOX 2: THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

(Extract from the United Nations General Assembly Resolution 70/1. *Transforming our World: the 2030 Agenda for Sustainable Development*)

Sustainable Development Goals

- Goal 1 End poverty in all its forms everywhere
- Goal 2 End hunger, achieve food security and improved nutrition and promote sustainable agriculture
- Goal 3 Ensure healthy lives and promote well-being for all at all ages
- Goal 4 Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
- Goal 5 Achieve gender equality and empower all women and girls
- Goal 6 Ensure availability and sustainable management of water and sanitation for all
- Goal 7 Ensure access to affordable, reliable, sustainable and modern energy for all
- Goal 8 Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
- Goal 9 Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
- Goal 10 Reduce inequality within and among countries
- Goal 11 Make cities and human settlements inclusive, safe, resilient and sustainable
- Goal 12 Ensure sustainable consumption and production patterns
- Goal 13 Take urgent action to combat climate change and its impacts
- Goal 14 Conserve and sustainably use the oceans, seas and marine resources for sustainable development
- Goal 15 Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
- Goal 16 Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
- Goal 17 Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development

However, APEEL believes a substantial gulf is likely to remain between this contemporary redesign of the sustainable development concept and the expression of a deeper sustainability goal. These different perceptions will continue to generate conjecture and debate concerning the appropriate societal goal that should underpin the operation of environmental law.

An interesting alternative expression of the *SDG* is to be found in the concept of ‘**environmentally sustainable innovation**’ (ESI)³⁷, which has enjoyed legal recognition in Europe in recent years through the articulation of environmental law principles that give force and effect to this concept (see further below in Part 4 of this paper). Such a goal recognises that ideas and movements around ‘mass innovation’, ‘democratic innovation’ or ‘user innovation’ significantly extend, and may eventually replace, conventional societal processes and structures (for example, in research departments in large transnational firms and large government civil service structures) for developing inventive products and services.³⁸ These ideas concerning ESI are given added force as the digital revolution and the internet enhance information and communication capabilities to a point where local, national and global innovation opportunities abound at the touch of a computer keyboard. In such circumstances, the innovative capabilities of individuals may one day achieve gradual acceptance as the single most valuable attribute of our economic lives. The proponents of ESI argue that this concept is not merely a rationale for technological determinism, because of the fundamental principles of environmental sustainability that underpin it, but, as with the recently adopted *SDGs*, there will still be critics for whom an entirely alternative paradigm is the only possible option for the future.

One such alternative paradigm that is now frequently advanced is based on the concept of ‘**sustainability**’. This has been urged as a more appropriate societal goal than sustainable development in its various evolving forms, in part because some actors, especially the business community and regulators, have tended to focus on sustaining *development* rather than sustaining the underlying ecological systems and processes.³⁹ Whilst the notion of sustainability is now enjoying increasing support, including in Australia,⁴⁰ its genesis rests in the literature and public debates of the 1960s and 1970’s, for example, the writings of Paul Ehrlich and the 1972 report of the Club of Rome, ‘*Limits to Growth*’.⁴¹ Their dire predictions regarding economic and environmental collapse due to ongoing and unlimited growth are argued to remain still relevant today.⁴²

In recent years, ecological economists have also been promoting the sustainability agenda, for example, around the concept of a ‘steady state economy’.⁴³ Consistent with this approach, the author and sustainability commentator, Richard Heinberg, has described five axioms of ‘societal and ecological sustainability’, as follows:⁴⁴

1. any society that continues to use critical resources unsustainably will collapse;
2. population growth and/or growth in the rates of consumption of resources cannot be sustained;
3. to be sustainable, the use of *renewable* resources must proceed at a rate that is less than or equal to the rate of natural replenishment;

37 T Foxon et al, *Policy Drivers and Barriers for Sustainable Innovation* (UK ESRC Sustainable Technologies Programme Monograph, 2006).

38 See for example, Erich von Hippel, *Democratising Innovation* (MIT Press, 2005) <<http://web.mit.edu/evhippel/www/democi.htm>>. For a contemporary environmental context, see Carlos Moeda, ‘The democratisation of innovation’ (Speech delivered at X Symposium Cotec Europa, Rome, 28 October 2015) <https://ec.europa.eu/commission/commissioners/2014-2019/moedas/announcements/democratisation-innovation_en>. Closer to home, these trends are beginning to be noticed in such publications as *The Australia Innovation System Report 2015*; Office of the Chief Economist, *The Australia Innovation System Report 2015*, Report (2015).

39 For analysis of the differences between sustainability and sustainable development, see Klaus Bosselmann, *The Sustainability Principle: Transforming Law and Governance* (Ashgate, 2008).

40 For example, the Strategic Plan of the Australian Conservation Foundation (2011-2020), calls for a ‘rapid transformational change to provide lasting solutions to Australia’s environmental problems and to create a sustainable future and better quality of life’: Australian Conservation Foundation, *Strategic Plan of the Australian Conservation Foundation (2011-2020)* (2010) <<https://www.acfonline.org.au/sites/default/files/resources/ACF%20Strategic%20Plan%202012%20-%20Transforming%20Australia.pdf>>.

41 See Paul Ehrlich and Anne Ehrlich, *The Population Bomb* (Ballantine Books, 1968); Barry Commoner, *The Closing Circle: Nature, Man, and Technology* (Knopf, 1971); Donella H Meadows, *The Limits to Growth: A Report for the Club of Rome’s Project on the Predicament of Mankind* (New American Library, 1972).

42 See G Turner, ‘Is Global Collapse Imminent?’ (MSSI Research Paper No. 4, Melbourne Sustainable Society Institute - The University of Melbourne, 2014); and G Turner ‘On the cusp of global collapse? Updated comparison of the Limits to Growth with historical data’ (2012) 21 *GAIA* 116. See also Paul R Ehrlich and Anne H Ehrlich, ‘Can a collapse of global civilisation be avoided?’ (2013) 280(1754) *Proceedings of the Royal Society B: Biological Sciences* <<http://rsps.royalsocietypublishing.org/content/280/1754/20122845>>.

43 See H E Daly and J B Cobb, *For the Common Good* (Beacon Press, 1989); and R Costanza et al, *An Introduction to Ecological Economics* (CRC Press, 2015).

44 Richard Heinberg, *Sustainability Metrics, Growth Limits and Philanthropy*, (25 June 2015) Post Carbon Institute <<http://www.postcarbon.org/sustainability-metrics-growth-limits-and-philanthropy>>.

4. to be sustainable, the use of *non-renewable* resources must proceed at a rate that is declining, and the rate of **decline must be greater than or equal to the rate of depletion**; and
5. sustainability requires that substances introduced into the environment from human activities must be minimized and rendered harmless to biosphere functions.

Underlying these various axioms is a broader belief that sustainability requires the maintenance of the Earth's remaining natural capital and the ecosystem services it provides, which in turn involves the proposition that the exploitation of natural capital should be confined to areas already strongly modified by human activities. This conception of sustainability finds strong support and reinforcement in the views of some leading scientists such as Harvard biologist, E.O. Wilson, who advocates the setting aside of 50% of the world's remaining biodiversity in order to address the mass extinction trend of the Anthropocene.⁴⁵

These biodiversity-focussed views have coalesced for some commentators around the concept of 'rewilding', which has emerged in recent decades as a new philosophy to realign human relationships with the natural world.⁴⁶ In practical terms, it focuses on ecological restoration of past damage and the protection and enhancement of natural systems, especially wilderness values. It thus differs from the goal of sustainable development, which has served as a prospective, defensive stance to prevent further degradation, rather than as a means of improving natural capital. Rewilding recognises that a strategy to *maintain* (as opposed to *enhance*) ecosystems may leave ecosystems and biodiversity vulnerable to further decline. Unless human population and consumption dramatically fall in the near future, proponents of rewilding see no alternative but to invest in the restoration and enhancement of ecosystems.

The rewilding movement has begun to influence some legal scholars through the emergence of the field of 'wild law'.⁴⁷ Whether rewilding and its legal articulation can be a serious alternative to existing or other proposed environmental goals of society is highly debatable, but APEEL believes that at the very least these ideas are relevant to some aspects of the redesign of environmental law, such as the inclusion of a new design principle of environmental restoration (as discussed later in this paper) and the introduction of a norm-based legal duty to restore and repair.

Another recent effort to move beyond the concepts of sustainable development and sustainability in the face of the realities of the 'Anthropocene' has focused on '**resilience thinking**' as a possible new orientation.⁴⁸ Such an approach has some resonance with the proponents of the need to reconnect people with nature as, for example, has been advocated by the PYL Alliance. However, as Panel member Professor Jan McDonald argued in her 2015 Mahla Pearlman Oration, whilst resilience thinking may add nuance and important supplementary concepts to the ESD goal, especially in relation to the need for adaptive management and transformation, it is unlikely to unseat ESD as the foundational goal of Australian environmental legislation.⁴⁹

Finally, some commentators, such as the international environmental lawyer Klaus Bosselmann, have called for more attention to be devoted to environmental ethics to underpin the sustainable development/sustainability agenda.⁵⁰ One example is the *Earth Charter*, which its promoters describe as 'a universal expression of ethical principles to foster sustainable development'.⁵¹ Many of the *Charter's* core principles are clustered around the theme of 'ecological integrity', whose elements are defined by the *Charter* to include: 'protect and restore the integrity of Earth's ecological systems, with special concern for biological diversity and the natural processes that sustain life'; and 'prevent harm as the best method of environmental protection and, when knowledge is limited, apply a precautionary approach'. These and other principles that may give force to the societal goal of sustainable development/sustainability are examined more fully in Part 3 of this paper.

45 For a discussion of this idea, see Tony Hiss, 'Can the World Really Set Aside Half of the Planet for Wildlife?' *Smithsonian Magazine* (September 2014).

46 See George Monbiot, *Feral Searching for Enchantment on the Frontiers of Rewilding* (Penguin, 2013); Dave Foreman, 'The Wildlands Project and the Rewilding of North America' (1998) 76 *Denver University Law Review* 535; and Caroline Fraser, *Rewilding the World: Dispatches from the Conservation Revolution* (Picador, 2009).

47 Wild Law UK, <<http://www.wildlawuk.org/wild-law.html>>. For an Australian perspective, see Peter Burdon (ed), *Exploring Wild Law* (Wakefield Press, 2011).

48 See for example, Melinda Benson and Robin Craig, 'The End of Sustainability' (2014) *Society and Natural Resources*, 1.

49 Jan McDonald, 'Is Resilience the New ESD?' (unpublished speech delivered at the Future of Environmental Law Symposium, Sydney, 5 March 2015). The viewpoint is similarly expressed at J McDonald, 'Using law to build resilience to climate change impacts' in B Hutter (ed), *Risk, Resilience and Environmental Regulation* (Edward Elgar, 2016).

50 K Bosselmann and R Engels, *The Earth Charter*, (KIT Publishers, 2010).

51 See Earth Charter Initiative, *The Earth Charter* <<http://earthcharter.org/discover/the-earth-charter>>.

Given the rich diversity of viewpoints that exist in this most recent stage of global environmental thinking, APEEL does not seek to present a firm conclusion with respect to the question of what should be the appropriate societal goal to underpin the operation of the next generation of environmental laws in Australia. However, APEEL recognises the importance of establishing such a goal and, in doing so, of questioning the effectiveness of the current ESD goal. Therefore, the questions that arise in this context, and which will be examined in the following sub-sections are:

- how effective has the current ESD goal been in Australia?
- should a revised or new societal goal be developed for Australia, and if so, by what process?
- once identified, how can this goal best be reflected in the next generation of Australian environmental law? and finally,
- to what extent can such laws be expected to contribute to the delivery of this goal?

2.2 Analysis

APEEL is strongly of the view that the identification and reflection in law of a fundamental societal goal is an essential prerequisite for the effective operation of the next generation of environmental laws in Australia. The Panel also believes that the current reliance in Australia upon ESD as the relevant goal needs to be rigorously reviewed, particularly in light of concerns that its operation has not been entirely successful.

As observed by Dr Gerry Bates, a leading Australian scholar in this field, the legal enunciation of ESD has been challenging for several reasons: legal definitions of ESD fail to guide decision-makers about its implementation; the concept's language is vague and ambiguous; there is a tendency 'to treat sustainability as part of a procedure for, rather than as a focus or outcome of, decision-making'; there is a lack of accountability 'for pursuing or achieving sustainable outcomes'; and there is a paucity of 'requirements in legislation for actually monitoring the sustainability of outcomes'.⁵²

Despite its extensive endorsement in both Commonwealth and state environmental legislation,⁵³ the concept of ESD has exerted variable influence in practice. APEEL notes that a substantial body of Australian ESD case law reflects a valiant effort by the judiciary to decipher when and how ESD might be applied or considered under existing laws.⁵⁴ There also are members of the judiciary who have endeavoured to promote a broader application of the concept.⁵⁵ However, some, such as former Judge Christine Trenorden, have noted that there is a widespread view that 'Australia has done little more than pay lip service to the goal and the implementation of the [ESD] strategy'.⁵⁶

It is APEEL's view that the limitations of ESD as a societal goal arise directly from its heavy reliance upon the *integration* of environmental, economic and social factors as the means of its accomplishment without addressing how this might be accomplished. The addition of 'ecological' to 'sustainable development' in Australia has not, in practice, resulted in a proper emphasis on environmental considerations, despite an objective that the conservation of biodiversity and ecological integrity should be a fundamental

52 Gerry Bates, *An Expert Paper on ESD Prepared by Dr Gerry Bates for the Commissioner for Sustainability and the Environment* (2013) 12 <http://www.environmentcommissioner.act.gov.au/_data/assets/pdf_file/0004/661720/An-Expert-Paper-on-ESD-by-Gerry-Bates-for-Commissioner-May-2014.pdf>.

53 For example, in NSW alone, it is estimated that over 60 pieces of legislation refer to ESD. See: Office of Environment and Heritage (NSW), *Biodiversity Legislation Review – Office of Environment and Heritage Paper 1: Objects NSW* (December 2014) 21.

54 Some interesting commentary on the application of ESD can be found in the following cases: *Leatch v Director-General of National Parks and Wildlife Service* (1993) 81 LGERA 270; *Conservation Council of South Australia v Development Assessment Committee and Tuna Boat Owners Assoc. (No 2)* [1999] SAERDC 86; *Tuna Boat Owners Assoc. of SA Inc. v Development Assessment Commission* (2000) 110 LGERA 1; *Telstra Corporation Ltd v Hornsby Shire Council* (2006) 146 LGERA 10 (*Telstra Corporations Case*); *Mount Lawley Pty Ltd and Western Australian Planning Commission* [2007] WASAT 59; *Moore River Company Pty Ltd and Western Australian Planning Commission* [2007] WASAT 98; and *WA Developments Pty Ltd and Western Australian Planning Commission* [2008] WASAT 260; *Bulga Milbrodale Progress Association Inc v Minister for Planning and Infrastructure and Warkworth Mining Limited* [2013] NSWLEC 48. Note that this is just a small selection of a much larger range of cases, particularly in the NSW Land and Environment Court, where such commentary can be found.

55 For example, see Brian J Preston, 'The Role of the Judiciary in Promoting Sustainable Development: The Experience of Asia and the Pacific' (2005) 9 *Asia Pacific Journal of Environmental Law* 109, 211: 'It is clear that the time for sustainable development has come, and it is essential that individual judges and national judiciaries seize the opportunity'.

56 Christine Trenorden, 'Ecologically Sustainable Development: Where Are We Going?' (Paper presented at the NELA Conference, 2014) <<http://www.nela.org.au/NELA/Documents/Christine-Trenorden.pdf>>.

consideration for decision-making under national environmental law.⁵⁷ The 'integrative approach' lies at the heart of *Our Common Future* and is clearly articulated in the *NSESD*, which provides that:

'We need to consider, in an integrated way, the wider economic, social and environmental implications of our decisions and actions for Australia, the international community and the biosphere; and we need to take a long-term rather than short-term view when taking those decisions and actions'.⁵⁸

The difficulties with the integrative approach that underpins the ESD goal have been widely discussed and fall into four broad areas:

- first, its effective implementation requires a balancing by decision-makers of environmental, economic and social goals that involves the making of subjective judgments, often in the face of scientific uncertainty, about trade-offs and which, in practice, often results in economic considerations being allowed to outweigh environmental and social concerns;
- second, it is implicitly based upon an underlying 'growth paradigm' which fails to address the ecological need for limits to global growth in economies, population and the consumption of natural resources;
- third, it lacks an underlying ethical foundation involving respect for nature upon which the implementation of the ESD concept through law and other means can be based; and
- fourth, some decisions or actions involve environmental risks that are very significant (for example, the extinction of a species or destruction of the ozone layer), such that restrictions or prohibitions on development, rather than the 'balancing' of environmental, economic and social considerations, are necessary.

Klaus Bosselmann suggests that the second and third issues are directly linked and concludes that:

'...no law will lead to changes if the underlying ethical foundations remain unchanged. Fundamentally, sustainable development is an ethical concept. It is here, at the level of environmental ethics and justice, that any reasoning about a law of sustainable development must begin'.⁵⁹

Apart from recognising these deficiencies in the current formulation and implementation of the ESD goal, APEEL also acknowledges the limits to which environmental legislation can by itself ensure the achievement of such a broad societal goal, especially one that is not shared by all members of society. The limitations of environmental law in this regard also stem from potentially countervailing laws, and policies in other domains. This has caused APEEL to consider the role of other areas of legislation that are not principally focused on the environment (see Australian Panel of Experts on Environmental Law, *Energy Regulation* (Technical Paper 6, 2017) and Australian Panel of Experts on Environmental Law, *The Private Sector, Business Law and Environmental Performance* (Technical Paper 7, 2017)) and also to examine the concept of environmental democracy as a means of reinforcing the effective implementation of environmental law (see Australian Panel of Experts in Environmental Law, *Democracy and the Environment* (Technical Paper 8, 2017)).

APEEL also understands that law is only one of a number of necessary means for delivering such a goal and that other mechanisms will be necessary. These may involve different institutional and procedural approaches to governance in the future, including the concept of shared governance (see Australian Panel of Experts on Environmental Law, *Environmental Governance* (Technical Paper 2, 2017)); the reform of financial and investment systems (see Australian Panel of Experts on Environmental Law, *The Private Sector, Business Law and Environmental Performance* (Technical Paper 7, 2017)); and new types of business or commercial initiatives such as social entrepreneurship (also *Technical Paper 7*). Hence, whilst law provides an important vehicle for the recognition and endorsement of the relevant societal goal, APEEL accepts that the law cannot provide the full means to ensure that this goal will be achieved.

⁵⁷ See for example, *EPBC Act* section 3A (d) for a statement of this objective.

⁵⁸ Council of Australian Governments, *National Strategy for Ecologically Sustainable Development* (1992) <<http://www.environment.gov.au/about-us/esd/publications/national-esd-strategy-part1>>; World Commission on Environment and Development, above n 32.

⁵⁹ Bosselmann, above n 29.

There is also an interesting question of whether it is possible for there to be a point in time at which such a goal could be determined to have been achieved. The *NSESD* carried the following significant caveat: ‘Governments recognise that there is no identifiable point where we can say we have achieved ESD’. Rather, achievement of a goal may need to be measured against meeting ongoing performance indicators, which in turn may often require continual monitoring and adjustment, as the philosophy of ‘adaptive management’ espouses.⁶⁰ The enunciation of ‘sustainable development indicators’ has been advanced by the European Community, the UN and other entities to help track progress towards ESD goals, and presently this mechanism appears to offer the best means of monitoring achievements and progress.⁶¹ As noted below, it is also necessary from time to time to re-evaluate and redefine the relevant goal and not to see it as a static, permanent concept (both in terms of its prescription and its means of implementation).

With respect to the appropriate societal goal for environmental law, APEEL concludes that ESD has had some influence on decision-making and regulation in Australia, but, as in other jurisdictions such as New Zealand,⁶² Canada⁶³ and the United Kingdom,⁶⁴ it does not yet appear to have been truly transformative.⁶⁵ Whether this is largely a consequence of difficulties in its implementation, or is due to more fundamental limitations with respect to the nature of the concept itself, remains the subject of considerable debate, including amongst the members of APEEL.

2.3 Proposals for reform

The mixed record of implementation of ESD in Australia suggests several possible conclusions, which each imply different scenarios for law reform, as follows:

- ESD is a useful goal for environmental law, but it needs to be implemented properly;
- ESD has not served to adequately achieve environmental objectives, thereby necessitating the development of a reformed version that involves a substantially revised approach; or
- the essence of the ESD goal is important, but Australia now needs to go beyond it and adopt a more expansive goal to complement or even replace it.

⁶⁰ See Craig R Allen and Ahjond Garmestani (eds), *Adaptive Management of Socio-Ecological Systems* (Springer, 2015).

⁶¹ United Nations, *Indicators of Sustainable Development: Guidelines and Methodologies* (UN, 2007).

⁶² New Zealand was probably the first country to enshrine a variation of ESD in its legislation as a national goal, nearly a decade before Australia. The *Resource Management Act 1991* (NZ), which consolidated and modernised many of New Zealand’s disparate environmental laws into one super statute, obliges decision-makers to promote the goal of ‘sustainable management’ of the country’s natural resources, along with obligations to consider cognate ‘matters of national importance’ (for example, the relationship of Maori with their ancestral environments), and the need to ‘have particular regard’ to many enumerated values, including an ‘ethic of stewardship’ and the ‘intrinsic value of ecosystems’. The New Zealand legislation has been widely acclaimed for its visionary path, and in some respects is well ahead of Australian federal laws. On the other hand, the *Resource Management Act* has attracted significant criticism for being overly time-consuming and expensive to administer and is perceived by some as a major impediment to economic activity – with these concerns leading to some amendments to the legislation to soften its effects. It has also been difficult to translate the ambitious provisions into practical, day-to-day rules and standards. See Owen Furuseth and Chris Cocklin, ‘Institutional Framework for Sustainable Resource Management: The New Zealand Model’ *Natural Resources Journal* (1995) 35, 243; and Owen McShane A ‘Think Piece’ on *Land Use Control under the RMA* (Ministry for the Environment, 1998). For recent developments, see David Grinlinton and Peter Salmon (eds), *Environmental Law in New Zealand* (Thomson Reuters, 2015).

⁶³ During the 1970s and 1980s, Canada was acclaimed globally for its progressive approach to environmental law reform. A number of Canadian environmental laws ostensibly still embody the norms of ESD, including the *Canada Environmental Assessment Act*, SC 2012, c 19 and the federal *Sustainable Development Act*, SC 2008, c 33. The *Canada National Parks Act*, SC 2000, c 32 introduced a novel goal based on ‘ecological integrity’ as the ‘first priority’ for the management of the federal parks system. Even more ambitious laws are found in some provinces, such as Nova Scotia’s *Environmental Goals and Sustainable Prosperity Act*, SNS 2007, c 7. But Canada’s reputation has waned in recent years and, under the previous Harper administration, there was extensive rewriting and even abolition of many environmental regulations. Commentators have observed that there is sometimes a significant disparity between the letter of the law and its administration owing to several factors, including judicial deference to deviating government practices, the powerful influence of the extractive industries sector, the country’s preoccupation with its international market competitiveness, and federal-provincial government tensions. See Stepan Wood, Georgia Tanner and Benjamin J Richardson, ‘What Ever Happened to Canadian Environmental Law’ (2011) 37 *Ecology Law Quarterly* 981. For an earlier critique, see David R Boyd, *Unnatural Law: Rethinking Canadian Environmental Law and Policy* (UBC Press, 2003).

⁶⁴ United Kingdom environmental laws are at least notionally heavily influenced by legal trends in the Europe, which has enshrined sustainable development as a fundamental goal in the constituent treaties of the European Union and European Community; See for example, *Treaty on European Union*, opened for signature 7 February 1992, [1992] OJ C 191/1 (entered into force 1 November 1993), as amended by *Treaty of Amsterdam Amending the Treaty on European Union, the Treaties Establishing the European Communities and Certain Related Acts*, opened for signature 2 October 1997, [1997] OJ C 340/1 (entered into force 1 May 1999), art 2; also, see Marc Pallemmaerts and Albena Azmanova (eds), *The European Union and Sustainable Development* (Institute for European Studies, 2006). However, the UK’s principal environmental laws, including the *Environmental Protection Act 1990* (UK), use sustainable development in a manner that provides no real influence upon development approvals due to problems of legislative complexity, incoherence, and a lack of clarity, integration and transparency; see UK Environmental Law Association, *The State of UK Environmental Law 2011-2012: Is There a Case for Legislative Reform* (UKEKLA, 2012) 6.

⁶⁵ See generally Robert V Percival, *Environmental Regulation: Law, Science and Policy* (Wolters Kluwer, 2009); Richard Macrory (ed), *Reflections on Thirty Years of EU Environmental Law* (2006); Richard Revesz, Philippe Sands and Richard B Stewart (eds), *Environmental Law, the Economy and Sustainable Development: The United States, the European Union and the International Community* (Cambridge University Press, 2008); and Benjamin J Richardson and Nicole Bakker, ‘Breaching the Maginot Line: The Frailty of Environmental Law in Europe and North America’ in P Taylor (ed), *Environmental Law for a Sustainable Society* (New Zealand Centre for Environmental Law, 2013) 51.

All of these possibilities should be laid on the table for consideration in a new process that is aimed at achieving substantial agreement at a national level on a new or revised societal goal that will in turn underpin the next generation of environmental law. **Accordingly, APEEL recommends that it is desirable to initiate a new, wide-ranging consultative process for the purpose of building a consensus on a new societal goal for Australia that could enhance or even replace the current ESD goal. This means, in practice, that Australia needs a new national strategy to replace or update the *NESD*, especially in light of the adoption by the UN in 2015 of a new set of *SDGs*.**

In advancing this proposal, it is noted that the *NESD* is now more than two decades old and has never been the subject of any formal revision process.⁶⁶ It is now commonplace for the many countries that adopted national sustainable development strategies (since 1990) to have undertaken regular revisions of these strategies from time to time. Most of these countries are now on a third or subsequent iteration of their original strategy.⁶⁷ In stark contrast, Australia remains saddled with a strategy that reflects the significantly different economic, social and environmental conditions of the late 1980's and which, not surprisingly, has been largely ignored for some years now as a prescription for the future direction of Australian society. On this basis alone, the time is long overdue for a fresh exercise to redefine Australia's relevant national societal goal.

The debate around a new societal goal must also take into account that Australia is a party to numerous international environmental treaties and associated international instruments, many of which affirm sustainable development and related principles for its environmental laws. Therefore, in reflecting on the future role of ESD in Australian environmental law, it is important to keep in mind Australia's existing international legal obligations, whilst also considering alternative paradigms that enjoy increasing support.

In this regard, the recent adoption by the UN in 2015 of the *SDGs*, a decision that the Australian government supported, provides a significant guide to possible fresh directions with respect to the proposed new societal goal and provides a compelling reason of itself to undertake the review process now recommended. Consistent with the 'bottom-up' approach that is envisaged with respect to implementation of the *SDGs*, Australia is obliged to report regularly to the UN on the strategies, targets and other means by which it will contribute to the achievement of the *SDGs* by 2030.

There is a growing body of commentary on how developed countries could address this task.⁶⁸ APEEL is of the opinion that the existing *NESD* cannot satisfy these obligations and that a new process therefore is required. In this regard, attention is drawn to a recent report by the Stakeholder Forum, which provides some insights into the implications of the *SDGs* for developed countries such as Australia. After noting that, for developed countries, the *SDGs* will require 'new economic paradigms and changes in patterns of behaviour, as well as new policies and commitments of resources', the report concludes:

'In our initial analysis, the methodology identifies the goals of sustainable consumption and production (SDG 12), sustainable energy (SDG 7) and combating climate change (SDG 13) as the three most transformational challenges facing developed countries – and as being the challenges on which the world at large needs to see the developed world place a strong emphasis for action so as to relieve the overall anthropogenic pressures on the planet and its natural systems. Other goals involving significant transformational change in developed countries include the need to achieve more sustainable economies and growth pathways, the goal of greater equality, and the goals to achieve better protection of the oceans and of terrestrial ecosystems'.⁶⁹

APEEL recognises also that perceptions as to which one of the *SDGs* should be accorded the highest priority will be likely to differ across different sectors and stakeholders. For example, a recent survey of Australian and New Zealand

66 APEEL acknowledges, however that the guiding principles of the *NESD* were broadly adopted in the *EPBC Act*, and that the Act in turn has been subject to a formal review (see *The Australian Environment Act: Report of the Independent Review of the Environment Protection and Biodiversity Conservation Act 1999* (Final report 30 October 2009)). APEEL notes also that subsequent strategies which were designed to complement the *NESD* have been subject to review (for example, the *Australia's Biodiversity Conservation Strategy* that is currently under review, see <<http://www.environment.gov.au/biodiversity/conservation/strategy>>).

67 See Klaus Bosselmann, *National Strategies for Sustainable Development: Options for New Zealand* (NZ Centre for Environmental Law Monograph Series 4, 2014) <<http://www.amazon.com.au/National-Strategies-Sustainability-Options-Monograph-ebook/dp/B00T256JN6>>.

68 For example, see German NGO Forum on Environment and Development, *Implementation of the Global 2030 Agenda for Sustainable Development in and by Germany* (March 2016) <www.forumue.de>. See also Mark Halle and Robert Wolfe, *Follow-Up and Review for the 2030 Agenda: Bringing coherence to the work of the HLPF* (The International Institute for Sustainable Development, March 2016) <www.iisd.org>.

69 Stakeholder Forum, 'Universal Sustainable Development Goals: Understanding the Transformational Challenge for Developed Countries' (May 2015) <http://www.stakeholderforum.org/images/stories/SF_-_SDG_Universality_Report_-_May_2015.pdf>.

industries found a high level of interest in advancing the *SDGs* agenda via strategic partnerships, with the most important goals being identified as gender equality (*SDG 5*), good health and wellbeing (*SDG 3*), decent work and economic growth (*SDG 8*), industry innovation and infrastructure (*SDG 9*), and climate action (*SDG 13*).⁷⁰ Caution will also be needed concerning the inter-relationship of these goals when implementing them, particularly in terms of achieving balanced and integrated outcomes.

APEEL notes a recent report by the UN Special Commissioner on Human Rights, John Knox, which identifies a link between the *SDGs* and human rights related to environmental protection. The report states that:

‘...implementation of the Sustainable Development Goals is highly important to the promotion of human rights and environmental protection. Accordingly, integrating the Goals into national priorities provides an opportunity for states to advance human rights related to the environment’.⁷¹

APEEL pursues the subject of human rights and the environment further in Australian Panel of Experts in Environmental Law, *Democracy and the Environment* (Technical Paper 8, 2017).

Whilst advancing the argument for a process to develop a new societal goal for Australia that encompasses environmental, economic and social needs, APEEL recognises that it is also necessary to have a realistic view of what law can achieve in terms of facilitating the recognition of such a societal goal. The central challenge for modernising Australian environmental law, as in any country, is that legislative prescriptions, no matter how well drafted or designed, are no assurance for success when they clash with other societal values or vested political interests. If law (of any variety) is understood as intended merely to follow or give effect to pre-determined social values, then there is a significant limitation on what can be achieved in Australian environmental law. While many Australians polled in surveys profess to care deeply about their natural environment, individuals tend to be much more reluctant to make meaningful behavioural changes, especially those changes that carry a financial cost to themselves. Consequently, if environmental law is ahead of social values, it will struggle to be implemented (assuming it can be adopted in the first place).

Conversely, if the law is conceived as a means to drive social change, then there is reason to be more hopeful about what it can achieve. The historical record shows that some societies have occasionally and dramatically shifted their moral sensibility through legal reform, for example, through the abolition of slavery, the rise of the animal welfare movement and, most recently, the greatly improved status of women in many countries. Similarly, the legal system might be used to engender or facilitate changes in social values regarding the natural environment, as the imprimatur of law has a legitimating function that can enable the targets of its regulation to be viewed by people as more serious or important. Legislating ambitious action on climate change, for instance, might be viewed by some people as a sign that climate change is indeed a very serious concern that warrants attention.

A third way to conceive the relationship between law and society is somewhere between these two models, namely that the law can create *processes* that serve to enhance participation, understanding and dialogue, which in turn can be harnessed to shape societal values and thereby build the momentum for reform. In Canada, the use of ‘round tables’ including the pioneering work of the former National Roundtable on the Environment and Economy, provides an example of the type of process that can help shape and build a national consensus for environmental policy.⁷² Likewise, Australia’s former Resource Assessment Commission (RAC) in the early 1990s played a seminal role in addressing highly contentious disputes over natural resources management, such as in the forestry sector. The public inquiry mechanism used by the RAC is the kind of institutional process that could be used more widely by law-makers to cultivate shifts in social values.⁷³

Applying these observations to the specific context of identifying a new societal goal, APEEL is of the opinion that the process it recommends for this purpose could be enhanced with legislative backing. The *NSES* was not the product

⁷⁰ Australian Centre for Corporate Social Responsibility, *Pathways to the Sustainable Development Goals: Annual Review of the State of CSR in Australia and New Zealand 2016* (June 2016) <<http://accsr.com.au/csr-services/latest-research/>>.

⁷¹ Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, A/HRC/31/53 (1 February 2016) <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2729588>.

⁷² See Wood, Tanner and Richardson, above n 63.

⁷³ Benjamin J. Richardson and Ben Boer, ‘Contribution of Public Inquiries to Environmental Assessment’ (1995) 2 *Australian Journal of Environmental Management* 90.

of a legislatively-mandated process, and was adopted instead through a non-public, political dialogue that involved its adoption ultimately by the Council of Australian Governments (COAG). In the course of this final, political evaluation of the outcomes of an earlier wide-ranging consultative process, compromises were struck in order to achieve political consensus. APEEL recommends an alternative approach that involves a process driven by a Commonwealth authority acting in accordance with a legislative mandate.

Australian Panel of Experts on Environmental Law, *Environmental Governance* (Technical Paper 2, 2017) advances a range of ideas for the reform of ‘environmental federalism’ in Australia, including the development of new Commonwealth institutions and new models and mechanisms for securing nationally coordinated approaches to environmental management. One possibility canvassed in that paper is to establish a Commonwealth Sustainability Commission with wide-ranging powers to promote an ESD/sustainability agenda in Australia, including the oversight of a process to develop a new societal goal in this context. APEEL sees those ideas as dovetailing closely with the recommendations in this paper concerning the undertaking of a process to develop a new societal goal.

RECOMMENDATION 1.1

The Commonwealth government initiate a wide-ranging, national consultative process for the purpose of building a substantial agreement on a new societal goal for Australia that would enhance or replace the current Ecologically Sustainable Development (ESD) goal contained in the National Strategy for Ecologically Sustainable Development (1992) (NSES), especially in light of the adoption by the United Nations in 2015 of the new Sustainable Development Goals (SDGs); and that it consider providing for the undertaking of this consultative process in its legislation.

3. Objects of environmental law

3.1 Overview

In pursuing the task of designing the next generation of environmental laws for Australia, a weighty consideration is whether – and how – to define some specific objects that should be attributed to the relevant legislation. This is not at all a theoretical or purely academic exercise. It is now commonplace to include an ‘objects clause’ in both Commonwealth and state environmental legislation, which sets out the purposes of the particular legislation. Such clauses can be referred to by courts when faced with uncertainty as to the meaning or effect of particular statutory provisions, in pursuance of the so-called ‘purposive’ approach to statutory interpretation.⁷⁴ For example, Australian courts have been called upon, from time to time, to decide whether, and to what extent, economic considerations should be taken into account in the exercise of decision-making functions under environmental legislation and have relied considerably in this context on an examination of the relevant objects clauses.⁷⁵

The value of objects clauses is widely accepted in Australia and most other countries. As one researcher explains, ‘[t]he reason for the prominence of objects clauses in Australian environmental law is that they have become a favoured method of introducing contemporary environmental principles and policies into both the federal and state regulatory frameworks’.⁷⁶ In practice, objects clauses have been used for the following distinct purposes:

- to endorse the societal goal of ESD;
- to set out environmental principles or policies, including those that elaborate the ESD goal (for example, the precautionary principle and the principle of inter-generational equity); and
- to identify specific objectives which are directly linked to the context of the particular legislation (for example, to protect native vegetation or to ensure the sustainable management of natural resources).

This part of the paper challenges this multiplicity of functions for objects clauses and proposes a more disciplined and tightly-focused approach to their drafting.

3.2 Analysis

The objectives of current Australian environmental legislation are not solely or wholly to be ascertained from the objects clauses contained therein, even under the purposive approach to statutory interpretation that is now widely endorsed by Australian courts. Judges must still have regard to the broad framework of the relevant legislation and cannot invoke a statement of objects to override the meaning of a provision where that is plain and clear. This means that it is important to take into account, when considering how to frame the next generation of environmental laws in Australia, the general objects of the existing system of environmental laws.

As a general observation, it is evident that a large proportion of current Australian environmental legislation, both Commonwealth and state/territory, has been produced with an underlying assumption that there must be some balancing of environmental and economic considerations in its operation. Environmental planning and protection legislation (for example, land use, EIA, pollution and hazardous chemicals laws) is broadly based on the assumption that activities should be allowed to proceed provided that they do not present unreasonable risks of harm to the

⁷⁴ This is a theory of statutory interpretation which holds that a court should consider the purpose behind a piece of legislation when interpreting its meaning. This approach has been confirmed in Australia – the *Acts Interpretation Act 1901* (Cth) s 15AA states that the interpretation that best achieves the purpose or object of the Act is to be preferred to all other interpretations.

⁷⁵ See for example, the High Court’s decision in *Phosphate Cooperative of Australia v Environment Protection Authority (Vic.)* (1977) 138 CLR 134 (where a majority held that economic considerations were irrelevant in relation to a licensing decision under the *Environment Protection Act 1970* (Vic); for contrary conclusions, see *Bienke v Minister for Primary Industries and Energy* (1994) 34 ALD 413 (holding that the phrase ‘optimum utilisation’ in *Fisheries Act 1952* (Cth) s 5B(b) was not limited to conservation measures and could include economic exploitation for the benefit of the littoral estate; and *Great Barrier Reef Marine Park Authority v India Pacific Pearls* (2004) 82 ALD 627 (holding financial benefits and detriments to a company seeking a pearl licence from the GBRMPA were relevant considerations).

⁷⁶ Brendan Fuller, ‘Statutory Interpretation and Environmental Law in Australia’ (Working Paper, Australian Centre for Environmental Law, 2002) <<https://digitalcollections.anu.edu.au/bitstream/1885/41601/3/StatutoryInterpretationandEnvironmentalLawinAustralia.pdf>>.

environment or human health. There is an increasing invocation of 'risk-based' approaches to decision-making under such laws, building on the traditions of cost-benefit analysis, whereby a balance is sought between potential impacts on the one hand and economic considerations on the other (both the potential economic benefits from the proposed activity and the alleged economic costs of more stringent environmental conditions).⁷⁷ It is far more common for activities to be approved subject to prescribed conditions under such laws than to be rejected altogether on environmental grounds.

The same observations may be made with respect to natural resources legislation in Australia, much of which was originally developed by the states well over a century ago for the purpose of ensuring an orderly allocation of land, water, minerals, oil and gas, fisheries and forests to those seeking to exploit such resources. The redesign of such laws over the past 40 or so years has resulted in the emergence of additional (and competing) objectives linked to the sustainable management of renewable resources and the protection of environmental values in the course of permitted extraction. However, there remains an underlying assumption, if not an expectation, that natural resources will be allocated and used for promoting economic development and growth in the perceived wider interests of society. This stance is manifestly evident in state mining, oil and gas laws, which generally enjoy a privileged priority over environmental legislation.

CASE STUDY: OBJECTS OF MINING LAWS IN NSW

The *Mining Act 1992* (NSW), includes in its objects: 'to encourage and facilitate the discovery and development of mineral resources in New South Wales, *having regard to the need to encourage ecologically sustainable development*' (emphasis added).⁷⁸ Not only is the wording particularly weak in terms of actually ensuring or achieving ESD, but NSW has also witnessed attempts via a subordinate legal instrument, in this case, a State Environmental Planning Policy (SEPP), to pre-determine decisions by explicitly prioritising economic considerations over social and environmental considerations.⁷⁹ (This is despite the fact that the primary planning laws of NSW also enshrine ESD as an object).

It is only laws that provide for the identification and protection of 'high value' components of the environment (for example, protected areas, endangered species, world heritage and built and cultural heritage) where there is an underpinning policy of environmental protection that can be considered to have some priority over economic considerations. But even here, pressures for mining, tourism and logging activities in various types of protected areas continue to create challenges for the effective implementation of such laws, both with respect to resistance to the creation of new protected areas and efforts to open up established conservation areas to development activities. While there are examples of legislative attempts to prioritise environmental protection over activities such as mining, it is impossible to avoid the contest between environmental protection and economic imperatives, except perhaps in relation to some specific sites.

⁷⁷ The merits of 'risk-based' regulation and its inter-action with the precautionary principle are discussed below, Section 4.3.1.1.

⁷⁸ *Mining Act 1992* (NSW) s 3A.

⁷⁹ *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007*, pt 3, cl 12AA 'Significance of resource'. Sub-clause (4) states: 'In determining whether to grant consent to the proposed development, the significance of the resource is to be the consent authority's principal consideration under this Part'. This amendment met with strong community opposition and has since been reviewed and repealed.

CASE STUDY: ARKAROOA PROTECTION AREA IN SOUTH AUSTRALIA

Located in the northern Flinders Ranges, Arkaroola is widely recognised for its outstanding geological, paleontological, biodiversity, conservation, landscape, wilderness, cultural, educational and tourism values. Community interest and debate about the conservation of Arkaroola led to the state government conducting public consultation on future management arrangements for balancing mining and conservation. On 22 July 2011, the South Australian Government announced that Arkaroola would be permanently protected through the establishment of the Arkaroola Protection Area. The [Arkaroola Protection Act 2012](#) (SA) was enacted to establish the Arkaroola Protection Area and to provide for the proper management and care of the area. In order to achieve the objects of the Act, the legislation specifically establishes that no mining activities, without exception, are permitted within the Arkaroola Protection Area.⁸⁰ The Arkaroola land was reserved from the operation of the *Mining Act 1971* (SA) and the *Opal Mining Act 1995* (SA) by a proclamation of the Governor. This additional level of environmental protection was achieved by site specific, special legislation, rather than by application of more general protected areas legislation.⁸¹

While there are examples such as Arkaroola of statutory objects that prioritise environmental protection, unfortunately many objects clauses fail to provide adequately for environmental protection. If the objectives of environmental legislation, whether explicitly stated in objects clauses or implicitly assumed by legislators when such laws are being drafted and adopted, are inconsistent or flawed in terms of the level of protection that they envisage for the environment, then this is a clear recipe for failure. Such laws are doomed from the outset in terms of achieving their stipulated environmental objectives due to the need for their implementation to take into consideration (and often give priority to) other, competing factors. But the identification of clearer and stronger objectives is not a simple task and, in particular, will be strongly influenced by, and likely to reflect, whatever is the broader societal goal that has been identified or assumed (as discussed in Part 1 of this paper). Thus, there is a clear link between the goals for, and objects of, environmental law.

Specified legislative objects are important to give legal effect to the goals for environmental law. Elevating ESD to the status of a legally binding 'object' rather than a non-binding 'goal' however, requires elaborating on the constituent elements of ESD and determining the weight to give them, especially when legislation may purport to have a variety of objects. The now common practice of including objects clauses in Australian environmental legislation frequently has involved lengthy and wide-ranging prescriptions that provide only marginal, and at times, conflicting guidance with respect to the interpretation of specific provisions. Furthermore, objects clauses often include statements of 'principles' that are of a different character from objectives and therefore not appropriate to include in such clauses.

⁸⁰ *Arkaroola Protection Act 2012* (SA) s 10(1). For further information, see <<http://www.environment.sa.gov.au/our-places/Arkaroola>>.

⁸¹ See *National Parks and Wildlife Act 1972* (SA).

CASE STUDY: EPBC ACT OBJECTS

The *EPBC Act* is less of an offender in terms of the length of its objects clause than many other Acts, but it still reflects an internally conflicted approach to its task. Sub-section 3(1) sets out eight objects of the Act. These include the goal-related objective ‘to promote ecologically sustainable development through the conservation and ecologically sustainable use of natural resources’ and a range of more subject-specific objectives such as ‘to provide for the protection of the environment, especially those aspects of the environment that are matters of national environmental significance’ and ‘to promote the conservation of biodiversity’. Commendably, the Act purports to distinguish objects from principles, and sets out separately in section 3A five widely-recognised ‘principles’ of ESD, including that ‘decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations’. Finally, it also affords specific recognition to the precautionary principle by requiring the Minister to have regard to it when making various decisions under the Act.⁸²

Whilst the *EPBC Act* objects are an example of a relatively disciplined legislative drafting approach, there is nevertheless an internal ambiguity that arises from the objectives related to environment protection and biodiversity conservation on the one hand, and the promotion of ESD, with the specific endorsement of the integrative approach, on the other. This leaves open to varied interpretations the question as to how far it is acceptable to trade off environmental protection and biodiversity conservation objectives and their related values in favour of long-term and short-term economic considerations. This ambiguity is replicated in many other objects clauses in Commonwealth and state legislation and inevitably has resulted in substantial contention with respect to decisions made under such legislation and a lessened confidence in its operation, both on the part of the community and regulated parties.⁸³

3.3 Proposals for reform

APEEL is of the opinion that there should be a more disciplined approach to the drafting of objects clauses in environmental legislation to ensure that they specify only the agreed societal goal for environmental law and the more specific objects of the particular legislation.

APEEL supports the inclusion within such clauses of specific objectives that are designed to elaborate the agreed, broader societal goal. As discussed below in relation to the principles of environmental law, this paper considers the ‘principles’ of inter and intra-generational equity, which are now embedded in the mainstream conception of sustainable development, to be more in the nature of a statement of objects than legally binding, directing principles. It would be appropriate therefore that these be given a specific recognition as part of the relevant societal goal articulated in an objects clause. To avoid the length and complexity that typifies current objects clauses, APEEL recommends that these aspects of the goal could be identified in the definitions clause that is usually included at the beginning of Australian legislation.

APEEL also supports the inclusion in objects clauses of a limited number of additional objectives that relate to the specific subject-matter of the legislation involved. There is still an important role for objects clauses to perform in providing a clearly-focused statement of the specific objects of each piece of environmental legislation that is related to its particular context. APEEL recommends that there be a much greater alignment between these respective types of objectives (goal-related and legislation-specific) in order to avoid the internal ambiguity and inconsistency that is

⁸² *EPBC Act* s 391.

⁸³ Arguably, the *EPBC Act* should be interpreted as giving primacy to the conservation of biodiversity and ecological integrity as the Act declares in section 3A that these are a ‘fundamental consideration in decision-making’ (emphasis added). This imperative also has been acknowledged in the *NSESD*, whose stated ‘core objectives’ include to ‘protect biological diversity and maintain essential ecological processes and life-support systems’ (emphasis added), however, the significance of this guiding principle is diminished by its presentation alongside a number of other, different principles.

widely evident in objects clauses in current environmental legislation, particularly with respect to the balancing of economic and environmental considerations.⁸⁴

APEEL also urges a clear separation between the statement of these goal-related objectives and the prescription of ESD/sustainability related principles of a 'directing' nature that are to be required to be applied in the course of exercising administrative functions provided for by environmental legislation. Such principles serve a distinct purpose from prescribed objects, in that they are essentially legally-required considerations, whereas objects are, or at least should be considered to be, simply an aid to the interpretation of particular aspects of legislation where some ambiguity or doubt exists with respect to their meaning. APEEL therefore advocates the exclusion from objects clauses of requirements for those charged with the implementation of the legislation to take into account various principles of a directing nature spelled out therein. APEEL urges instead that such principles be set out separately elsewhere in environmental legislation as matters that are required to be referred to and applied in the exercise of various functions under such legislation.

RECOMMENDATION 1.2

Law-makers should adopt a more disciplined approach to the drafting of objects clauses in the next generation of Australian environmental legislation to ensure that: (1) they specify only the agreed societal goal for environmental law and some more specific objects applicable to the context of the particular legislation; (2) closely align these goal-related and context-specific objects statements; and (3) avoid the inclusion of principles of a 'directing' nature in such clauses.

⁸⁴ This tension between economic and environmental considerations may also be lessened if the recommendations in Australian Panel of Experts on Environmental Law, *The Private Sector, Business Law and Environmental Performance* (Technical Paper 7, 2017) are adopted with regard to reforming corporate law, tax law and other aspects of economic governance that presently often convey signals contrary to ESD.

4. Principles of environmental law

4.1 Overview: differentiating environmental law principles

In seeking to establish the foundations upon which the next generation of environmental laws in Australia should be built, APEEL has set itself the task of identifying the ‘core’ principles that will underpin this system. The idea that the next generation of Australian environmental laws should be based upon such principles is disarmingly simple, but quite challenging in its application. At the outset, as has been explained in the previous two sections of this paper, it is necessary to distinguish principles from goals and objects. For example, the so-called ‘principle’ of ESD in support of the conservation of biological diversity and ecological integrity is better regarded as an object, in that it is purposive and directed to a desired outcome. Many other purported principles of environmental law likewise are essentially objects in reality. For example, the *Earth Charter*, which is claimed to be a declaration of principles for a just, sustainable and peaceful world, actually comprises 16 statements that are mainly objects that can contribute collectively to the achievement of its overall goal. By contrast, the essential element of a principle is its capacity to guide how something happens or works, or to operate as a rule that is to be followed. By applying this test, APEEL believes that it is possible to identify several distinct types of principles that each serve a particular purpose related to the design of the next generation of environmental laws.

There are now numerous collations and catalogues of so-called environmental law principles (see text-box immediately below).⁸⁵ An early statement of principles of environmental law was produced in the 1987 *report of* the United Nations World Commission on Environment and Development, *Our Common Future*,⁸⁶ and other versions have emerged since.

BOX 3: LINKS TO LISTS OF RECOGNISED AND EMERGING ENVIRONMENTAL LAW PRINCIPLES

- The United Nations *World Charter for Nature* (1982), identifies 24 principles and prescriptions. See: <http://www.un.org/documents/ga/res/37/a37r007.htm>
- The United Nations *Rio Declaration on Environment and Development* (1992), sets out 27 principles. See: <http://www.un.org/documents/ga/conf151/aconf15126-1annex1.htm>
- The *Declaration by the European Council on the Environmental Imperative* (1990).
- See: <https://www1.umn.edu/humanrts/environmentaldeclaration.html>
- *The Earth Charter* (2000). See: <http://earthcharter.org/discover/what-is-the-earth-charter/> (but, as noted above, this is an ethical framework for building a just, sustainable, and peaceful global society that identifies 16 principles, better described as objects).
- The *Draft IUCN International Covenant on Environment and Development (Part II)* (5th edition, Updated Text, 2010). See: http://cmsdata.iucn.org/downloads/eplp_31_rev_4.pdf

⁸⁵ See Eloise Scotford, *Environmental Principles and the Evolution of Environmental Law* (Hart Publishing, 2016).

⁸⁶ World Commission on Environment and Development, above n 32.

This ‘catalogue’ approach of listing and explaining a range of purported principles of environmental law has some educational value, but it does not offer a clear and convincing basis for their recognition and reflection in environmental legislation. APEEL considered a large number of the principles identified in these various ‘catalogues’, but has decided to take a more nuanced approach by seeking to categorise environmental law principles **according to their function**, rather than simply compiling a shopping list of general principles. Accordingly, in this paper, the focus is on two specific categories of principles that serve quite distinct functions. These are principles that guide how laws are designed and drafted (**design-based principles**); and principles of a rules-based nature that must be applied by decision-makers when they are performing functions under environmental legislation (**directing principles**).

Before elaborating on these two types of environmental law principles, it is important to note that there is at least one other possible functional category involving **principles for allocating roles and responsibilities** (for example, the subsidiarity principle) and that this area is explored in Australian Panel of Experts on Environmental Law, *Environmental Governance* (Technical Paper 2, 2017). Also, APEEL does not seek to canvass here those principles which operate exclusively in the international environmental law sphere, which serve to define relationships and responsibilities between nations with respect to environmental harm (for example, the principle of common, but differentiated responsibility which has been invoked in relation to climate change mitigation).

4.2 Design-based principles

4.2.1 Description and analysis

A substantial proportion of the principles that have been identified in the various catalogues serve the function of setting out guidelines or criteria that should be applied to the design of environmental legislation. Such principles can be reflected in the provisions of environmental legislation through the various mechanism and tools that are provided for therein. A simple example is the widely-accepted *polluter pays principle*. Whilst it might be possible to recognise this principle explicitly in legislation, there is usually no direct legal consequence in doing so. Unlike statements of objectives, the articulation of this principle in legislation is unlikely to assist in its interpretation. Likewise, it is unlikely to constitute a workable rule to be applied in the performance of functions prescribed by legislation and hence APEEL concludes that it should not be regarded as a directing principle, but rather as a design principle.

APEEL suggests that there is nothing to be gained by incorporating design-based principles *within* environmental legislation, although it is common for this to be done by way of inclusion in lengthy objects clauses (thereby also confusing the distinction between objects and principles). On the other hand, the identification and endorsement by other means⁸⁷ of specific design-based principles that are intended to guide the substantive content of environmental legislation is highly desirable. For example, in the case of the *polluter pays principle*, it may result in the application of this principle through legislative provision for regulatory measures that enable the recovery of the costs of pollution incidents from responsible parties or the legislative prescription of market-based mechanisms that place a price on particular forms of pollution.

APEEL recommends that design-based principles may themselves be divided into seven sub-categories.

First, there is a group of principles that have been advocated as a means of promoting the objective of ‘**smart regulation**’⁸⁸, including the following:

- the *policy mix principle* – that is, a complementary range of instruments is desirable to address an issue. These should include regulatory tools, economic measures, information-based measures, self-regulatory alternatives (for low impact, low risk activities) and voluntary measures.

⁸⁷ For example, governments might endorse design principles via a strategy statement that expresses the principles upon which they intend to base their legislation, policy and management approaches with respect to the environment. Alternatively, design principles could be incorporated as a specific component of a sustainable development strategy, provided that, in so doing, they are clearly distinguished from directing principles.

⁸⁸ Neil Gunningham and Peter Grabosky, *Smart Regulation: Designing Environmental Policy* (Clarendon Press, 1998).

- the *parsimony principle* – that is, less interventionist instruments or approaches should be applied first to achieve desired environmental outcomes (for example, it would make little sense to deploy scarce enforcement resources on those who are willing to comply voluntarily under less interventionist approaches).
- the *escalation principle* – that is, regulatory measures should ascend a dynamic instrument pyramid to the extent necessary to achieve policy goals.⁸⁹

Second, there are design principles that promote various **economic measures**, the most widely-recognised being the principle that polluters should pay for their environmental impacts. There is also the principle that has been recognised in the *IGAE*, the *NSESD* and the *EPBC Act* that supports *improved valuation, pricing and incentive mechanisms*. This principle has been poorly applied in practice via legislation (for example, a clear pricing mechanism for carbon emissions was repealed in 2014) and it also requires complementary measures such as the reform of Gross Domestic Product (GDP) accounting and the development of new indicators of environmental performance.

A third sub-category of design-based principles involves the endorsement of particular **regulatory tools or mechanisms** that should be incorporated within environmental legislation, for example, EIA as a means of providing for robust and preferably independent scientific advice to decision-makers. APEEL also specifically includes here the variant of EIA, strategic environmental assessment (SEA), which covers plans and programs.⁹⁰

A fourth sub-category of design principles involves the recognition of principles related to procedures for achieving **environmental democracy**, the most widely accepted of which are the so-called ‘three pillars’ that arise from the *Aarhus Convention*: *access to information*, *public participation* and *access to justice*.⁹¹ For each of these ‘pillar’ principles to have any direct legal force or effect, it is necessary for environmental legislation to establish specific procedural mechanisms to give effect to them. For example, with respect to access to justice, there must be legislative provision for open standing or the avoidance of costs awards in public interest cases. To these core environmental democracy principles could be added principles in support of transparency and accountability in the administration of environmental legislation and the emerging principle of free, prior and informed consent in relation to actions that might have a serious impact within the lands of indigenous peoples. These matters are dealt with in detail in Australian Panel of Experts in Environmental Law, *Democracy and the Environment* (Technical Paper 8, 2017).

The remaining sub-categories of design principles that APEEL identifies involve new and evolving concepts that are still undergoing development. These relate to ensuring responsiveness and flexibility in environmental management, to recognising the need for environmental restoration at an ecosystem level and to avoiding regression in the levels of environmental protection afforded by law.

APEEL recommends the recognition of a design principle of **flexible and responsive environmental governance** in view of the fact that environmental conditions are rarely static. APEEL suggests it is essential that the next generation of environmental legislation enables environmental governance to have the flexibility to adapt to changing circumstances. Pollution standards may need to be strengthened, water allocations may need to be cut or nature conservation plans may need revision. Climate change, if unmitigated, will likely intensify the pace of environmental change, often in an adverse manner through events such as more frequent droughts and inundation of coastal shorelines. Apart from the dynamic properties of the environment, social values also shift and with time a community might demand higher or different environmental standards.

A number of APEEL papers, including Australian Panel of Experts on Environmental Law, *Terrestrial Biodiversity Conservation and Natural Resources Management Governance* (Technical Paper 3, 2017), highlight the need for the next generation of Australian environmental laws to be more flexible and responsive to their dynamic context. APEEL therefore concludes that a foundational design principle in support of this concept should be recognised for the next

⁸⁹ One example of how this principle is applied is in relation to establishing a hierarchy of options to address non-compliance with an environmental law. An inspector might assume a duty holder was willing to comply voluntarily and send an information letter explaining legal requirements. However, if this did not produce willing compliance, this might escalate to a warning letter, then to a remediation or clean up notice, followed by a penalty notice, with the option of last resort involving legal action in the form of civil or criminal sanctions.

⁹⁰ APEEL notes other types of assessments may be associated with EIA, including with respect to cumulative, health, social and strategic impacts.

⁹¹ *Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters*, opened for signature 25 June 1998, 2161 UNTS 447 (entered into force 30 October 2001).

generation of Australian environmental law. APEEL is of the opinion that it behoves regulators to design policies and laws that are capable of being adjusted in light of performance failures, new environmental circumstances, changing scientific knowledge and evolving social values. This may require that future licences and other kinds of environmental authorisations are not necessarily regarded as permanent and immutable, but rather as contingent and open to revision. Similarly, management plans for national parks, rivers, fisheries and other natural resources should be amenable to periodic adjustment.

Having such adaptiveness also may require in some instances that the rights of developers or property owners are articulated differently at the time of being granted. For instance, a right to harvest fish or take water may need to be expressed as a percentage share of a variable allocation rather than a fixed quantitative entitlement. Having increased adaptive flexibility may sometimes even necessitate halting an economic development or resource activity. However, APEEL acknowledges that, in the absence of behaviour which constitutes a serious breach of environmental or other laws (for example, regarding worker safety), such action should only be undertaken where existing property rights and other legal entitlements are respected through due process and compensation arrangements.

APEEL also proposes the introduction of an **environmental restoration principle**.⁹² Whilst some current environmental legislation contains provisions for the rehabilitation of specific places affected by environmental damage (such as former mines or brownfield sites), these provisions have often proved far from effective⁹³ and they rarely address the more ambitious challenge of restoration of entire landscapes and ecosystems. The latter is a particularly serious challenge for Australia given the huge environmental changes and losses across the continent over the past two centuries. Sustaining some aspects of Australia's present environment is unlikely to be attainable if some of this prior damage is not addressed. An explicit design principle concerning environmental restoration could help to address this significant challenge by requiring law-makers to have regard to the opportunities to promote restoration when drafting the next generation of environmental laws. This could be accomplished by including provisions that require the implementation of specific environmental legislation to be guided by a strategic plan for the environmental restoration of any asset, place or resource governed by the relevant legislation (where biologically feasible, socially acceptable and financially affordable). It could also be provided that all decisions under such legislation should take into account the goals of a strategic plan for environmental restoration and the opportunities for environmental restoration that may be available in the course of undertaking any activities that are subject to such decisions. APEEL considers that any environmental restoration obligations incorporated into legal decisions (for example, approvals, licences, or the adoption of land use plans) need to be framed with reference to an underlying restoration strategy because, without such a 'big picture' strategy, it would be impossible to achieve restoration of the environment through ad hoc, incremental decisions.

In proposing this new principle of environmental restoration, APEEL acknowledges the reality of ongoing ecological change (which will likely intensify if climate change is not mitigated), and emphasises that it should not be understood as requiring reinstatement of environmental conditions that existed in some historic, 'pristine' era, but rather as aiming to improve the complexity, structure and resilience of ecosystems to enable them to adapt to changing conditions. In other words, where ecological changes have resulted in irreparable shifts to a 'novel' ecosystem, any environmental restoration program will need to take a more pragmatic and limited approach.⁹⁴ Even where restoration to a more historic condition might be biologically feasible, it might still be questionable for reasons of community opposition or financial cost.⁹⁵

The final category of emerging design principles is the **principle of non-regression**, which focusses on the overall impact and efficacy of environmental legislation, in particular the idea that there should be no retreat or backwards movement with respect to the level of protection afforded to the environment. In a sense, it provides a direct

92 APEEL defines 'environmental restoration' to mean 'actions to initiate or facilitate the recovery of an ecosystem, in whole or in part, with respect to its integrity, health and sustainability': see Benjamin J Richardson, 'Reclaiming Nature: Eco-restoration of Liminal Spaces' (2015) 2 *Australian Journal of Environmental Law* 1. See also Margaret A Palmer and J B Ruhl, 'Aligning restoration science and the law to sustain ecological infrastructure for the future' (2015) 13 *Frontiers in Ecology and the Environment* 512.

93 See for example, Environmental Justice Australia, *Dodging Clean-up Costs – Six Tricks Coal Mining Companies Play* (April 2016) <https://envirojustice.org.au/sites/default/files/files/EJA_Dodging_clean_up_costs.pdf>.

94 Lauren M Hallett et al, 'Towards a Conceptual Framework for Novel Ecosystems' in R J Hobbs, E S Higgs and C. Hall (eds), *Novel Ecosystems: Intervening in the New Ecological World Order* (Wiley-Blackwell, 2013) 18.

95 Benjamin J Richardson and Ted Lefroy, 'Restoration Dialogues: Improving the Governance of Ecological Restoration' (2016) 24(5) *Restoration Ecology* 668.

counterpart to the principle of responsiveness and flexibility, which promotes the concept of continuous improvement, by seeking to preclude regressive measures. In recent years, the respected French environmental lawyer, Michel Prieur, has promoted the recognition of the *principle of 'non-regression'* as a fundamental element of environmental law. Prieur notes widespread 'back-sliding' in levels of environmental protection in some countries and observes that: '[a]t a time when environmental law is enshrined in numerous constitutions as a new human right, it is paradoxically threatened in substance'.⁹⁶

Whilst this principle is still in its infancy in terms of its international recognition and acceptance, it might usefully inform the development of the next generation of Australian environmental law. In its most credible form, the principle asserts that non-regression in the levels of environmental protection is required for effective environmental regulation at the international, regional, and national levels.⁹⁷ However, the principle has some potential limitations that need to be considered.

One issue is that it may be argued to be inconsistent with the basic constitutional concept of the mutability of legislation (in other words, that laws should be able to be amended from time to time, or even repealed), which is fundamental to the rule of law and democracy. APEEL suggests this objection can be dismissed if the principle is treated for the purposes of domestic law as a design principle rather than a firm legal rule.

A second challenge is that even among committed environmental lawyers and policy makers, there may be disagreement about whether a particular legal change is 'progressive' or 'regressive'. For instance, in recent years, there has been strong disagreement about the use of biodiversity and carbon offsets. Some welcome offsets as a means to efficiently achieve environmental gains, while others view them problematically as providing a loophole for environmentally pernicious development.⁹⁸ More specific and credible criteria are clearly needed for determining whether a law change is to be characterised as 'regressive', as distinct from 'progressive'. For example, if regression is to be assessed according to the intended environmental outcome of a law, then repeal of land clearing laws or repeal of a carbon pricing mechanism provide clear examples of legislative changes that would qualify as 'regressive'. APEEL believes there are many situations in which efforts by governments to wind back existing levels of environmental protection will be readily discernible as 'regressive' in nature and hence susceptible, to the application of this principle. By treating non-regression as a design principle rather than embedding it within the architecture of environmental law regimes, it can serve to operate in a political context in the same way as other design-based principles of environmental law.

4.2.2 Proposals for reform

With the exception of the principles of flexible and responsive environmental governance, environmental restoration and non-regression, the design principles as described above are already widely recognised and well understood. However, they are not consistently reflected in current Australian environmental legislation. APEEL therefore proposes that, together with these three new design principles, they should constitute a simple 'checklist' for governments and legislative drafters to refer to when preparing new or amended environmental legislation that is intended to present the next generation of Australian environmental law.

⁹⁶ Michel Prieur, 'Non-Regression in Environmental Law' (2012) 5(2) *Surveys and Perspectives Integrating Environment and Society* 53 <<https://sapiens.revues.org/1405>>.

⁹⁷ The International Union for the Conservation of Nature (IUCN) has provided a qualified endorsement of the non-regression principle, at its 2012 World Conservation Congress. Noting 'the need for measures to prevent backsliding or regression on the level of protection attained by each state according to its development status', the Congress resolved to urge 'national governments to recognise that non-regression in their environmental law and policy is necessary for achieving sustainable development objectives except where flexibility enhances conservation': see WCC-2012-Res-128-EN, 'Need for non-regression in environmental law and policy' <http://2012congress.iucn.org/member_s_assembly/resolutions/>.

⁹⁸ Philip Gibbons and David Lindenmayer, 'Offsets for Land Clearing: No Net Loss or the Tail Wagging the Dog?' (2007) 8 *Ecological Management and Restoration* 26; Ricardo Bayon, Nathaniel Carroll and Jessica Fox (eds), *Conservation and Biodiversity Banking* (Earthscan, 2008). Offsets are also addressed in Australian Panel of Experts on Environmental Law, *Terrestrial Biodiversity Conservation and Natural Resources Management Governance* (Technical Paper 3, 2017).

RECOMMENDATION 1.3

When designing the next generation of Australian environmental laws, law-makers should draft legislation that is consistent with, and gives effect to, the following ‘design-based’ principles:

- *Principles of smart regulation;*
- *Principles supporting the use of economic measures;*
- *Principles that endorse specific, widely-recognised regulatory tools and mechanisms; and*
- *Principles in support of environmental democracy;*

together with the following new principles which have not yet been widely recognised or adopted in Australia:

- *A principle of flexible and responsive environmental governance;*
 - *A principle of environmental restoration; and*
 - *A principle of non-regression*
-

4.3 Directing principles

4.3.1 Description and analysis

Rules-based principles have been described by the European legal scholar, Nicholas de Sadeleer, as ‘directing principles’. De Sadeleer suggests that these principles take the form of rules of indeterminate content and that they defy the dichotomy between principles and rules identified by the legal philosopher, Ronald Dworkin.⁹⁹ De Sadeleer proposes three directing principles of environmental law: the polluter pays principle; the precautionary principle; and the prevention principle and argues that precaution and prevention are more significant than the polluter pays principle because they are designed to avoid environmental harm rather than impose liability for it.

In terms of established, well-recognised directing principles, APEEL agrees with De Sadeleer’s endorsement of the precautionary and prevention principles as directing principles. However, as noted above, APEEL believes that the polluter pays principle is better regarded as a design principle than as a directing principle that operates as a legal rule as it provides a clear conceptual basis for the design of specific provisions within environmental legislation that will ensure the internalisation of the costs of environmental harm (for example, load-based licensing provisions, the imposition of obligations with respect to the clean-up of pollution and compensation of victims and provision for the payment of natural resources damages).

APEEL has formed the view that directing principles involve the imposition of a legally enforceable duty imposed by legislation on decision-makers to seriously address particular prescribed matters when exercising their statutory functions. APEEL believes both the precautionary principle and the prevention principle fall into this category and constitute well-recognised and accepted examples of directing principles. Before examining these particular principles in detail, however, it is necessary to elaborate a little further on the specific legal nature and effect of these principles. APEEL has suggested, in defining the term ‘principle’, that directing principles are ‘rules-based’ in nature and are required to be applied in the implementation of environmental law (both in the making of decisions and the development of policies, plans and programs). They are therefore of a higher status than so-called ‘relevant considerations’ which are required to be taken into account by those implementing environmental legislation. Many

⁹⁹ See Nicolas De Sadeleer, *Environmental Principles: From Political Slogans to Legal Rules* (Oxford University Press, 2002).

environmental law cases involving judicial review of administrative decisions indicate how it is relatively simple for decision-makers to satisfy a court that they have ‘had regard to’ required relevant considerations, whilst also proceeding to ultimately dismiss them in the particular circumstances.

APEEL therefore suggests that when the directing principles outlined below are incorporated into the next generation of Australian environmental legislation, the relevant provisions should use language that is considerably stronger than the conventional statutory requirement to ‘have regard to’ particular matters. Looking to suitable precedents overseas, the *Environment (Wales) Act 2016* requires that the Minister administering the Act ‘must apply’ the principles of sustainable management of natural resources set out in the Act (s 4(1)(b)). An even stronger mandate is imposed under the *Canada National Parks Act* (SC 2000, c32), section 8(2) of which provides that ‘the maintenance or restoration of ecological integrity...shall be the first priority’ of the Minister administering the Act. Strong statutory language along the abovementioned lines is required to ensure that the status of these fundamental, ‘directing’ principles is appropriately reflected in the next generation of Australian environmental law.

4.3.1.1 The precautionary principle

In environmental law, the precautionary principle requires that where there are threats of serious or irreversible damage to the environment, lack of full scientific certainty shall not be used as a reason for postponing measures to prevent environmental degradation.¹⁰⁰ There are various ways in which the precautionary principle may be applied in practice. It can, for example, provide a principled justification for the adoption of policies and laws of a preventive nature in the face of a lack of full scientific certainty, as has been argued is warranted with respect to climate change mitigation. In this regard, it might be characterised as a type of design principle. But it is clear that it may also operate as a directing principle, by being prescribed as a relevant consideration for decision-makers (see for example, the *EPBC Act*, s 391(1)). What this means, or at least should mean in practice, is that where scientific knowledge about possible environmental damage likely to arise from a proposed activity is incomplete or uncertain, decision-makers should err on the side of caution by not approving such activity where there is the possibility of serious or irreversible damage. There is an obvious ‘threshold’ issue involved in this regard as to when such a possibility exists. This can result in the principle becoming subject to significantly differing interpretations and application.

APEEL believes that the effective implementation of the precautionary principle in Australia has been undermined by a reluctance on the part of both decision-makers and Australian courts to give vigorous effect to it in many instances. The proper application of this principle requires a willingness by decision-makers to look beyond conventional or mainstream scientific evidence and take into account epistemological, methodological and sociological deficiencies in the current science; it also necessitates public engagement in this investigative process.¹⁰¹ For instance, while a scientific risk assessment may reveal the boundaries of certainty and uncertainty, democratic decision-making needs also to properly take account of the community’s perception of, and appetite for, risk, and must include provision for appropriate risk communication and management measures. These are necessary features of a precautionary approach that are not addressed through scientific risk assessment alone.

In the courts, proper application of the principle will also require a change in legal culture to countenance reference by decision-makers not only to scientific risk assessments, but also to these other forms of understanding of risk arising from democratic and political processes.¹⁰²

¹⁰⁰ This prescription of the precautionary principle is presented in the *IGAE*, cl 3.4; the *NESD Guiding Principles*; and, in a slightly restructured format, in section 391(2) of the *EPBC Act*. It differs slightly from the prescription presented in article 15 of the *Rio Declaration on Environment and Development 1992* by excluding the term ‘cost-effective’ in relation to ‘measures to prevent environmental degradation’; however, the *IGAE* also states that the application of the principle should be guided by ‘an assessment of the risk-weighted consequences of various options’. For a detailed judicial analysis of the principle, see the judgment of Preston CJ in *Telstra Corporations Case* (2006) 67 NSWLR 256, where he concludes that, in applying the principle, preventive measures should be proportionately calibrated to the threatened damage.

¹⁰¹ See J Peel, *The Precautionary Principle in Practice – Environmental Decision-making and Scientific Uncertainty* (The Federation Press, 2005). See also C Bryan, ‘Co-opting the precautionary principle: The Victoria Planning Provisions’ “one kilometre consent requirement” for wind energy facilities’ (2016) *Environmental Planning and Law Journal* 203, 211.

¹⁰² Jacqueline Peel, ‘When (Scientific) Rationality Rules: (Mis)Application of the Precautionary Principle in Australian Mobile Phone Tower Cases’ (2007) 19 *Journal of Environmental Law* 103; see also Bryan, above n 101.

There is an additional, potential challenge to the proper application of the precautionary principle that is presented as a result of the widespread endorsement by Australian governments of so-called ‘risk-based regulation’ which focuses on achieving prescribed outcomes, whilst minimising regulatory processes and compliance costs.¹⁰³ This approach is now being widely adopted by state and Commonwealth environmental authorities across a range of regulatory processes, including environmental licensing, EIA processes and natural resources management (for example, mining regulation).¹⁰⁴ A recent example is the adoption by the Commonwealth of a performance-based approach to the setting of conditions for approvals under the *EPBC Act*.¹⁰⁵

Risk-based regulation places the responsibility on proponents, in consultation with the regulator, to identify the impacts that may accrue as a result of their proposed activity and then to agree on outcomes that must be met in order to ensure that the impacts remain within acceptable limits. The identification of likely impacts involves a risk-based assessment process that is now widely favoured by environmental authorities in Australia, in preference to the application of more rigid, technology-based standards that have been relied upon in the past. The proponent must then assume responsibility to undertake agreed activities (often framed as conditions) to achieve the agreed outcomes. The proponent is also required to continue to monitor and report in order to demonstrate that the desired conditions are being met and will not be compromised during subsequent operations. The regulator assumes the role of a negotiator to ensure that all relevant impacts are identified, that appropriate conditions are agreed upon for the development proposal to proceed and that these conditions are met and outcomes achieved subsequently during operations.

This approach needs to be linked also to the concept of adaptive management, as described above, in the context of the suggested design principle of flexible environmental governance. Where designated outcomes have not been accomplished, it must be possible under environmental legislation to adjust the conditions applicable to a particular activity to enable the problems to be addressed. In extreme circumstances where significant, unanticipated impacts have occurred, there may need to be a capacity to withdraw approval for the relevant activity (as has occurred recently with respect to attempts to pursue underground coal gasification trial projects in Queensland).¹⁰⁶

APEEL believes that the general merits of risk and outcomes-based regulation are highly contingent upon certain basic requirements being satisfied. Its advocates argue that this approach is particularly suited to situations where risks are relatively predictable, with a corresponding reliance being placed upon an adaptive management process to alter the responsibilities of proponents where unanticipated consequences arise. APEEL considers that a risk and outcomes-based approach that is rigorous, efficient, transparent and well managed can provide a credible method to meet the objectives of environmental legislation, but it is sceptical about the likelihood of these conditions being met regularly in practice. Ensuring that risk and outcomes-based programs manage anticipated risks requires environmental legislation to include **independent review processes** at both the proposal and operation stage. It is also essential that **adequate baseline data** is available and used appropriately to identify all likely impacts from proposed activities and to negotiate required outcomes. Unless such measures are provided for in environmental legislation, and are accompanied by adequate resourcing of environmental authorities to ensure their effective implementation, there is a serious danger that risk-based regulation can become a process of negotiated regulatory outcomes in which the outcomes specified may be compromised or arbitrary and their accomplishment is neither monitored nor guaranteed.

With respect to the specific question of the proper application of the precautionary principle, APEEL believes there is a need to avoid the substitution of the risk and outcomes-based approach for the application of the precautionary principle in circumstances where there is a substantial lack of scientific certainty with respect to potentially serious risks together with a possibility of serious or irreversible damage. As noted above, APEEL believes that the precautionary principle should be recognised explicitly in environmental legislation and given full force and effect in

¹⁰³ APEEL acknowledges the advice and input of Dr Lyn Brake in relation to the following examination of outcomes-based approaches to environmental management. It nevertheless takes responsibility for the observations and conclusions offered with respect to this topic.

¹⁰⁴ For a detailed description of the wide-ranging initiatives with respect to risk-based regulation, see *National Review of Environmental Regulation: Interim Report* (March 2015) 6-9.

¹⁰⁵ Department of Environment (Cth), *Outcomes-Based Conditions Guidance* (July, 2015).

¹⁰⁶ See ‘Queensland bans underground coal gasification over environmental risks’, *The Guardian* (online), 16 April 2016 <<https://www.theguardian.com/australia-news/2016/apr/18/queensland-bans-underground-coal-gasification-over-environmental-risk>>. As noted above, such action may also give rise to the need for due process and compensation in some circumstances.

those circumstances where it is potentially applicable. Risk-based regulation should not be employed as a negotiated alternative to the deferral of activities in circumstances where the application of the precautionary principle is clearly warranted.¹⁰⁷

4.3.1.2 The prevention principle

The precautionary principle is closely related to, but is widely considered to differ from, the prevention principle, which calls for action to be taken to prevent known risks of environmental harm from materialising.¹⁰⁸ It seeks to address likely or anticipated risks through preventive measures, whereas the precautionary principle deals with uncertain or hypothetical risks by constraining possibly damaging activities.

It is difficult to point to express endorsements of the prevention principle in Australian environmental legislation. Although pollution prevention is often defined in various ways as an object of environment protection legislation, this has not translated into a directing principle of the same nature as the precautionary principle. The prevention principle has its origins in international environmental law, where it calls on states to take anticipatory action to prevent damage to the environment by avoiding, prohibiting or controlling activities that threaten harm, but it has also been widely recognised as a companion to the precautionary principle in European national environmental law.¹⁰⁹ In Australia, courts and tribunals have on occasions called for a 'cautionary' approach in situations where the threshold of uncertainty required to trigger the precautionary principle has not been reached,¹¹⁰ but there has not been a clear endorsement of the prevention principle in this context.

In discussing this situation, Gerry Bates has posed the following question: 'Would it not be more useful for practical decision-making if prevention and precaution were to replace reliance on caution and precaution?'¹¹¹ APEEL believes that an affirmative answer to this question is clearly warranted and therefore supports the recognition of the prevention principle as a separate and additional directing principle that would sit alongside the precautionary principle in the next generation of Australian environmental law. APEEL also notes that the prevention principle has been reflected in a practical manner in some environmental legislation through the prescription of a general environmental duty of care. This concept is discussed in more detail in the next section of this paper.

4.3.1.3 Other 'recognised' directing principles

Another possible directing principle that some commentators believe emanates from the goal of sustainable development is the principle of **inter-generational equity**. This principle is concerned with ensuring that the present generation maintains or enhances the health, diversity and productivity of the environment for the benefit of future generations.¹¹² Whilst this principle has not been prescribed in Australian environmental legislation as commonly as the precautionary principle, it has been invoked occasionally by Australian courts where the goal of ESD has been stated as a legislative objective.¹¹³ It has, for example, been referred to in legislation relating to Aboriginal cultural heritage, as illustrated by the following case study.

¹⁰⁷ Also note the recommendation below to apply a principle of prevention, rather than a so-called 'cautionary approach', in circumstances where risks are thought to be sufficiently clear as to warrant the use of a risk and outcomes-based approach.

¹⁰⁸ Some commentators support the view that prevention as a stand-alone principle is being absorbed into the precautionary principle: for example, see Arie Trouborst, 'Prevention, Precaution, Logic and Law' (2008) 2 *Erasmus Law Review* 106.

¹⁰⁹ See de Sadeleer, above n 99, 125.

¹¹⁰ See for example, *Dixon & Australian Fisheries Management Authority* [2000] AATA 242; see also Preston CJ in *Telstra Corporations Case* (2006) 67 NSWLR 256.

¹¹¹ G M Bates, *Environmental Law in Australia* (LexisNexis, 8th ed, 2013) 252.

¹¹² For example, see the *EPBC Act* s 3A(c).

¹¹³ See for example, *Gray v Minister for Planning* [2006] NSWLEC 720.

CASE STUDY: THE ANDERSON CASE¹¹⁴

In this case, traditional owners of land at Angels Beach, East Ballina, challenged the validity of a consent issued under the NSW *National Parks and Wildlife Act 1974* (NSW) (*NPW Act*) which allowed the destruction of Aboriginal cultural heritage for a residential subdivision. Section 2A of the *NPW Act* specifies that the objects of the Act are to be achieved by applying the principles of ESD. Pain J stated that the consent authority was not literally required by the *NPW Act* to refer to the principles of ESD. However, Pain J found that 'in the circumstances of this case it is striking that he has not referred to issues relevant to an assessment of significance from an inter-generational perspective'. Pain J went on to state that 'a key matter attested to in the Applicants' affidavits and evidence in the case is the importance to Aboriginal people of sites where their ancestors have been present demonstrated by, inter alia, the presence of objects which they consider significant by virtue of that association. Obviously the fewer of these sites that remain, the less opportunity there will be for future generations of Aboriginal people to enjoy the cultural benefits of those sites'.

A leading international scholar on the intergenerational equity principle, Professor Edith Brown-Weiss, has suggested that it constitutes a legal framework that encompasses 'planetary rights and obligations held by each generation' and which provides 'a normative basis for the concept of sustainable development'.¹¹⁵ Viewed this way, it is difficult to categorise this concept as a rules-based principle that is capable of regular application by decision-makers. Anderson's case, referred to above, is an unusual exception in this regard.

On balance, APEEL concludes that the principle of inter-generational equity may be better regarded as an objective arising from the underlying goal of sustainable development to which regard may be had by decision-makers (and the courts) where it may assist in the interpretation of particular legislation, rather than a directing principle which decision-makers should be required to apply. The same observations are appropriate with respect to the principle of **intra-generational equity**, which also derives its existence from the concept of sustainable development. The principle can be incorporated as part of a defined object of environmental legislation, but more specific measures and tools also will need to be laid out within such legislation for it to have any legal force or effect. In the United States, this has been pursued through various legal measures designed to ensure 'environmental justice',¹¹⁶ but there has been little explicit attention devoted to this dimension of environmental law in Australia. APEEL notes that this object has relevance also to the legal context for indigenous peoples and their access to land and other natural resources. These considerations are canvassed in more detail in Australian Panel of Experts in Environmental Law, *Democracy and the Environment* (Technical Paper 8, 2017).

The following section presents proposals for reform with respect to directing principles, including the recommendation of two new principles that could provide valuable reinforcement to the two principles which have just been described and supported. These new directing principles have not been the subject of any serious discussion or recognition in Australia until now, but their adoption as foundational principles for the next generation of environmental laws could significantly enhance the quality and outcomes of environmental decision-making.

¹¹⁴ *Anderson & Anor v The Director-General of the Department of Environment and Conservation & Ors* [2006] NSWLEC 12 [199].

¹¹⁵ Edith Brown Weiss, 'In Fairness to Future Generations and Sustainable Development' (1992) 8 *American University Law Review* 19.

¹¹⁶ Michael B Gerrard and Sheila R Foster (eds), *The Law of Environmental Justice: Theories and Procedures to Address Disproportionate Risks* (American Bar Association, 2008).

4.3.2 Proposals for reform

4.3.2.1 Existing directing principles

Both the precautionary and the prevention principles should be clearly prescribed as directing principles in the next generation of Australian environmental law. However, APEEL also recognises that, in relation to the precautionary principle, its implementation requires a more vigorous interpretation by decision-makers, to be reinforced also by the courts, than has been evident to date.¹¹⁷ There is a limit to the capacity for legislation to mandate such an approach through a strengthened formulation of the principle;¹¹⁸ instead, there is a need for a greater emphasis to be placed by decision-makers on ensuring that protective or preventive measures are proportionate to the threat of environmental harm that is presented by a particular situation. This will require a more critical appraisal of mainstream scientific evidence and also much greater public engagement and involvement in decision-making processes. In particular, in such a precautionary decision-making framework, society should have a say in what level of risk and potential harm is acceptable (see also Australian Panel of Experts in Environmental Law, *Democracy and the Environment* (Technical Paper 8, 2017)).

In the case of the prevention principle, APEEL suggests that this could take the form of a duty imposed on decision-makers to require all reasonable measures to be taken to prevent any likely or anticipated environmental harm that may arise from a proposed activity.¹¹⁹

APEEL notes also, in this context, the wide support within Australian governments for risk and outcomes-based regulation, sometimes also characterised as the adoption of a 'cautious' approach. APEEL believes, first, that this approach should not be allowed to override or exclude the implementation of the precautionary principle in circumstances where the threshold levels concerning scientific uncertainty and potential consequences have been crossed; and second, that a focus on prevention rather than caution would be a far more satisfactory approach in circumstances where likely or anticipated risks are involved.

RECOMMENDATION 1.4

The precautionary principle and the prevention principle should be essential prescriptions¹²⁰ in the next generation of Australian environmental law, accompanied by provision for the engagement of the public in decision-making with respect to the level of risk and potential harm that is deemed acceptable.¹²¹

4.3.2.2 New directing principles

In addition to endorsing the abovementioned, established directing principles, APEEL also proposes that some new principles be developed as a part of the next generation of environmental law, particularly to drive **environmentally sustainable innovation** (ESI). The ESI principles would provide stronger guidance on how to implement the societal goal of ESD (or a new version focussed on sustainability) in practice by affording greater significance to environmental objectives than occurs at present. Like the precautionary and prevention principles, they would need to be reinforced by strong statutory language that requires decision-makers to fully apply or give priority to them in exercising their statutory functions.

¹¹⁷ Some guidance may be provided in this regard from Europe, where the 1996 *Communication from the EU Commissioner on the precautionary principle* (COM/2000/0001 final) outlines the strengths and weaknesses of risk-assessment and risk-based approaches and how they might be addressed in policy and regulatory terms.

¹¹⁸ As noted above, APEEL also urges that instead of the usual requirement to consider relevant matters, directing principles should be made the subject of stronger statutory language that calls for decision-makers to 'fully apply' or 'give priority' to these principles.

¹¹⁹ See further the following section of this paper on norms of environmental law.

¹²⁰ Namely, in addition to setting out the relevant principles, the relevant legislation should impose an obligation on decision-makers to 'fully apply' or 'give priority to' these principles (and those spelled out in Recommendation 1.5) when exercising their statutory functions.

¹²¹ With respect to the precautionary principle, APEEL also concludes that the current shift by environmental regulators towards risk and outcomes-based regulation should not replace the application of this principle wherever the required threshold level of scientific uncertainty exists.

APEEL proposes the adoption of two new principles that are based on the concept of ESI. In order to ensure that the implementation of environmental legislation is guided by a clear duty to strive for the best possible environmental outcomes, APEEL believes that decision-makers should be required to apply standards that will deliver **innovative solutions** rather than those that have been fixed on the basis that they will deliver the most economically achievable outcomes in any given situation. In advancing these principles, APEEL proffers the view that environmental effects and change are dynamic in nature, as is human innovation, and that decisions that are based on static standards are counterintuitive because they ignore this dynamism. APEEL notes that this approach has been adopted in recent years in the European Union (EU) and has proved feasible in practice. Drawing on the EU experience, APEEL proposes two specific principles that should guide decision-making under the next generation of environmental laws.

First, APEEL proposes the adoption of a **high environmental quality principle**. This principle requires all decisions and actions to aim for an optimal level of environmental protection and biodiversity conservation and could be framed as follows: ‘In the implementation of this Act, all decisions and actions shall achieve a high level of environmental protection and biodiversity conservation, consistent with what is technically feasible in the particular circumstances’. In a similar form, this principle has been applied already in judicial decisions and opinions in the EU.¹²² Defined carefully, APEEL believes it could provide a strong alternative to the current ESD-related approach of integrating economic, social and environmental considerations, which has often resulted in prioritising economic over environmental and social concerns.¹²³

Second, APEEL proposes a **best available techniques principle**. This principle would require all decisions and actions to be based upon the application of the best available techniques,¹²⁴ by mandating the application of up-to-date tools and methods suitable for protecting the environment and conserving biological diversity.¹²⁵ It could be implemented through the inclusion in environmental legislation of a provision to the following effect: ‘In the implementation of this Act, all decisions and actions shall be based upon the application of the best available techniques (BAT)’. BAT could be defined as ‘the most effective and advanced stage in the development of particular techniques and their methods of application, which indicates their practical suitability for protecting the environment and conserving biological diversity’.¹²⁶

RECOMMENDATION 1.5

The next generation of environmental laws should also prescribe the following, new directing principles concerning environmentally sustainable innovation (ESI):

- *A principle of achieving a high level of environment protection; and*
 - *A principle of applying the best available techniques (BAT).*
-

¹²² Three of the most recent cases are: *Shell Nederland Verkoopmaatschappij BV v. Belgian Shell NV* (Court of Justice of the European Union, C-241/12, C-242/12, 12 December 2013); *European Commission v. Kingdom of Spain* (Court of Justice of the European Union, C-151/12, 24 October 2013); *Essent Belgium NV v. Vlaamse Reguleringsinstantie voor de Elektriciteits- en Gasmarkt (VREG)* (Court of Justice of the European Union, C-204/12, C-206/12, C-208/12, 11 September 2014).

¹²³ In proposing this principle, APEEL gave serious consideration to proposing a ‘highest’ environmental quality principle, on the basis that this would clearly prioritise environmental considerations over economic ones. However, APEEL have opted ultimately to recommend the version of this principle that has been adopted and applied successfully in Europe in recent years, in the belief that this would still provide a significant, new standard for decision-making that should work better than current approaches based on the balancing of economic, environmental and social factors.

¹²⁴ ‘Techniques’ includes both the technology used and the way in which a project, undertaking or installation is designed, built, maintained, operated and decommissioned. Note that this principle differs substantially from the ‘best available technology’ standard employed in past years, particularly in the United Kingdom, as an approach to pollution control. It has a wider ambit in terms of both the circumstances in which it may apply and the types of solutions it commands.

¹²⁵ A recent Victorian case that helps to demonstrate the possible application of this principle: *G3 Projects Pty Ltd v Yarra CC (Red Dot)* [2016] VCAT 373 (9 March 2016). This case reviewed the proposed construction of a 10 storey building that Council had refused to approve, partly because it considered it did not meet ESD objectives that were contained in Clause 22.17 of the Yarra Planning Scheme. In particular, Council was concerned that inadequate consideration was given to providing best practice internal environmental quality through adequate daylight to dwellings. The decision discusses how to assess the objective to achieve best practice in ESD for daylighting and how to identify what best practice is. The Tribunal found this should be based on the best practice tools identified in the policy in the absence of any alternative industry best practice derived from an independent authority.

¹²⁶ For examples of the application of a similar version of this principle in the EU, see sub-articles 3(10) and 11(6) of *Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control)*, [2010] OJ L 334, 17.12. also sub-articles 2(11) and 9(4) of *Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control*, [1996] OJ L 257, 26. For sample judicial decisions in this regard see: *Ragn-Sells AS v. Sillamäe Linnavalitsus* (Court of Justice of the European Union, C-292/12, 12 December 2013) not yet reported, and *European Commission v. Ireland* (Court of Justice of the European Union, C-158/12, 11 April 2013) 17, not yet reported (re: duty to apply best available techniques and quality standards). Compliance with BAT has also been recognised by the International Court of Justice in the case entitled *Pulp Mills on the River Uruguay (Argentina v. Uruguay)* [2010] ICJ Rep (20 April 2010) not yet reported.

4.3.3 Possible, deeper ‘sustainability’ principles

APEEL has advanced the new, directing principles concerning ESI outlined above on the basis that they may give some specific force and effect to a substantially revised ESD societal goal. In doing so, it is aware that there has already been some experience with the operation of these principles within the EU. However, should the process recommended in Part 1 of this paper lead to the adoption of a new societal goal based on a deeper sustainability concept, APEEL recognises that other, even more far-reaching, directory principles may be required to assist the implementation of this goal. Such principles could be derived, for example, from the five axioms of sustainability advanced by Richard Heinberg referred to in Section 2.1 of this paper, for example, in the following forms:

- **a principle that no use of *renewable* resources should be permitted if such use is at a rate that is less than or equal to the rate of natural replenishment;**
- **a principle that no use of *non-renewable* resources should be permitted unless it involves a rate of decline in such use that is greater than or equal to the rate of depletion;**
- **a principle that the exploitation of natural capital should be confined to areas already strongly modified by human activities.**

APEEL recognises that principles of this nature are more far-reaching than those already proposed above and that their recognition in a future generation of environmental legislation would only be possible if based on a prior, substantial community consensus concerning a societal goal that embraces a deeper sustainability concept. APEEL does not suggest that the principles proposed above would be the most likely, or the only, ones to be associated with such a goal, but they are presented here to demonstrate how it may be possible to reflect a deeper sustainability goal in legislation through the prescription of related directing principles. **APEEL will welcome feed-back or suggestions concerning the directing principles that might be regarded as necessary and appropriate to the implementation of a deeper sustainability societal goal.**

5. Norms of environmental law: general rights and duties

5.1 Overview

The idea that the system of environmental law as described at the beginning of this paper can be underpinned by certain norms in the form of general rights and duties with respect to the environment is largely alien to the Australian context, but it enjoys considerable recognition and application in many other countries. APEEL has identified two reasons for this contrasting situation.

First, the prescription of normative environmental rights and duties has been accomplished in many instances through national constitutions, a phenomenon that has been described as ‘environmental constitutionalism’.¹²⁷ The vast majority of national constitutions around the world have been written or substantially revised over the past 30 to 40 years, at a time and in circumstances where environmental degradation has presented as a clear and pressing national challenge. Accordingly, the inclusion of normative provisions concerning the environment in constitutions drafted or substantially revised during this period has become commonplace. It is estimated that more than 75 nations now have provisions within their constitutions that set out rights and duties with respect to the environment in one form or another.¹²⁸ There is a question in some instances as to whether the constitutional language used is purely inspirational and hortatory or, on the other hand, it has normative effect in the sense that the relevant provisions can be regarded as giving effect to legally enforceable rights and duties. But the clear trend is towards the latter situation, with courts in many countries showing a willingness to give some substantive effect to such provisions.¹²⁹

Australia, by contrast, has a *Constitution* that is now more than a century old and one which has proved extremely difficult to amend. The idea of inserting provisions of a normative nature concerning the environment into the *Australian Constitution* has not been seriously raised and the concept of environmental constitutionalism remains alien to the Australian system of environmental law. Indeed, even the idea of an amendment to section 51 of the *Constitution* to provide a specific power to legislate on environmental matters was rejected by the Constitutional Commission in the course of its wide-ranging examination of the *Australian Constitution* in the late-1980s, on the rather spurious ground that it would be too difficult for the Commonwealth to implement such powers given state control of land use and ownership of mineral resources.¹³⁰

The second, and related, reason why general environmental norms, at least those based on the prescription of fundamental rights, have not been contemplated in Australia is the absence of a Bill of Rights through which such rights might be established. Despite calls for the adoption of a Bill or Charter of Rights from time to time,¹³¹ this avenue for the prescription of normative environmental rights remains unavailable in Australia currently. This subject is discussed more fully in Australian Panel of Experts in Environmental Law, *Democracy and the Environment* (Technical Paper 8, 2017).

It remains possible that general environmental rights and duties could be prescribed in environmental legislation within each jurisdiction within Australia, as an alternative to having one set of over-arching norms generated by the *Constitution* or a national Bill of Rights. There are examples of this approach elsewhere, for example, the Michigan *Environmental Protection Act 1970* and the *Ontario Environmental Bill of Rights 1993*.¹³² Likewise, it may be possible to

¹²⁷ See J R May and E Daly, *Global Environmental Constitutionalism* (Cambridge University Press, 2014); and May, J R and Daly E, *Environmental Constitutionalism* (Edward Elgar Publishing, 2016).

¹²⁸ See J R May and E Daly, ‘Constitutional Environmental Rights’ (2014) *Encyclopaedia of Public Administration and Public Policy* <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2787211>. The authors indicate that some 75 countries have constitutions that provide for substantive environmental rights, and which, in many instances, also impose environmental duties on individuals and government; they also note that over 120 constitutions contain provisions related to natural resources in one form or another. See also L Kotze, *Global Environmental Constitutionalism in the Anthropocene* (Hart Publishing, 2016).

¹²⁹ J R May and E Daly, above n 128, 9 noting that ‘...courts around the world are increasingly accepting constitutional environmental challenges and engaging with the difficult questions they pose’.

¹³⁰ Commonwealth of Australia, *Final Report of the Constitutional Commission*, vol 2 (1988) 757-760. Australian Panel of Experts on Environmental Law, *Environmental Governance* (Technical Paper 2, 2017) discusses further the question of whether such an amendment to the *Australian Constitution* should be pursued.

¹³¹ See for example, M R Wilcox, *An Australian Charter of Rights?* (Law Book Company, 1993).

¹³² Section 2(1) of the Michigan *Environmental Protection Act 1970* provides that any person may seek relief from the courts to protect the ‘air, water and other natural resources and the public trust therein from pollution, impairment or destruction’. This simple provision afforded both procedural (that is, standing) rights and a substantive cause of action. By contrast, the *Ontario Environmental Bill of Rights (S.O 1993)* provides a strictly procedural approach.

turn to **common law** principles in the search for normative rights and duties, the most significant example being the recognition in the United States of the ‘public trust’ doctrine for the purpose of protecting certain natural resources held in public ownership from exploitation.¹³³ However, neither legislative prescription of environmental rights and duties nor judicial recognition and application of the public trust doctrine have presented as significant elements of the Australian system of environmental law and there remains, as a result, a substantial vacuum with respect to this fundamental component of the foundations of Australian environmental law.

5.2 Analysis

The question that obviously arises in this context is whether the vacuum with respect to normative environmental rights and duties in Australia should be filled. Would the Australian system of environmental law be enhanced in terms of its capacity to secure desirable environmental outcomes by vesting a power in citizens to invoke general environmental rights or duties in particular circumstances?

APEEL is of the view that this question should be answered in the affirmative. The establishment of such norms would serve to provide a basic standard of environmental protection that underpins and potentially overrides the operation of more specific environmental measures where the operation of those measures has failed to meet the relevant normative standard. Whilst it is reasonable to expect that, in the vast majority of situations, the operation of the next generation of environmental laws will provide better and more effective outcomes, APEEL believes this goal can be reinforced by the availability of recourse to legal action based on normative rights and duties in the occasional circumstances where this expectation has not been met. The lesson to be learned from the steadily expanding experience with environmental constitutionalism in many other countries is that such a ‘backstop’ for the environmental law system provides a valuable safeguard against the maladministration of environmental laws.¹³⁴

Australian Panel of Experts in Environmental Law, *Democracy and the Environment* (Technical Paper 8, 2017), explores in much greater detail how a ‘rights-based’ approach to environmental law could be developed in Australia, including by way of a national Bill of Rights. *Technical Paper 8* also canvasses the possibility that this may be accomplished through uniform measures within environmental legislation across all the jurisdictions within Australia rather than by way of a constitutional amendment or a Bill of Rights.¹³⁵ For this reason, this paper does not propose any specific reforms with respect to the prescription of environmental rights, deferring instead to the more detailed treatment of this subject in Australian Panel of Experts in Environmental Law, *Democracy and the Environment* (Technical Paper 8, 2017).

However, in the following section, the creation of two forms of environmental duty are proposed, which APEEL believes would give specific force and effect respectively to one of the directing principles and one of the design principles identified above: the prevention principle and the principle of environmental restoration.

5.3 Proposals for reform

APEEL first proposes the idea of a general **environmental duty of care**, which the Panel notes has found some limited recognition already in Australian environmental legislation in recent years. The South Australian, Tasmanian and Queensland environmental protection Acts each specifically provide for a ‘general environmental duty’.¹³⁶ These provisions impose a general obligation upon all persons to take all reasonable and practical measures to prevent

¹³³ The modern form of the public trust doctrine (which is based on Roman law principles) was first advanced by Professor Joseph Sax in 1970: see J L Sax, ‘The Public Trust Doctrine in Natural Resources Law: Effective Judicial Intervention’ (1970) 68 *Michigan Law Review* 471; for a more recent and reframed exposition of the doctrine, see M C Wood, *Nature’s Trust: Environmental Law for a New Ecological Age* (Cambridge University Press, 2013).

¹³⁴ There is empirical evidence to support the view that countries with such rights and duties have better environmental governance and conditions: see D Boyd, *The Environmental Rights Revolution: A Global Study of Constitutions, Human Rights and the Environment* (University of British Columbia Press, 2012).

¹³⁵ Australian Panel of Experts on Environmental Law, *Environmental Governance* (Technical Paper 2, 2017), also advances some ideas concerning how a relatively uniform approach to the prescription of environmental rights and duties could be secured by the Commonwealth as part of a broader, national strategic leadership approach to environmental management.

¹³⁶ *Environment Protection Act 1993* (SA) s 25; *Environmental Management and Pollution Control Act 1994* (Tas) s 23A; *Environment Protection Act 1994* (Qld) s 319; *Environment Protection Act 1997* (ACT) ss 22–23A.

or minimise pollution or environmental harm that is threatened by their activity. In this regard, they give clear legal expression to the prevention principle by creating a general norm in the form of a duty of care towards the environment. This general duty is enforceable normally only by means of civil sanctions and a breach thereof does not constitute an environmental offence, although APEEL sees no reason why this should not also be the case.

There have been some attempts to prescribe a general duty of care in other environmental law contexts. For example, the South Australian *Natural Resources Management Act 2004* imposes a 'general statutory duty' on all persons to 'act reasonably in relation to the management of natural resources within the State' (s 9 (1)). This provision seeks to reflect the idea that land-holders have a duty of care towards the land they occupy. Once again, this duty is enforceable only through the imposition of civil sanctions and does not give rise to any criminal penalty. Its wording, however, is of such a general nature that it is open to a wide range of interpretations. It would benefit from being framed in a more specific manner (for example, 'to take all reasonable and practicable measures to avoid causing harm to the natural resources of the State unless authorised to do so').

APEEL believes it is appropriate for a general duty of care to be prescribed as a routine component of the next generation of environmental legislation.¹³⁷ Such a duty of care would amount to a prohibition on the causing of environmental harm or damage in appropriate circumstances. In the absence of a capacity or willingness to impose such a duty constitutionally, APEEL envisages that it would need to be incorporated in general environmental legislation on an Act by Act basis.

APEEL also considers that it would be appropriate to provide for a general **environmental duty to repair and restore**, as a specific means of implementing the environmental restoration design principle alongside the approach outlined in the discussion above of this principle. This duty could be imposed by environmental legislation on all persons who have caused environmental harm. It could also extend to government authorities (for example, those responsible for the management of public lands) to oblige them to take proactive action to repair and restore degraded areas. Such a duty would need to be reinforced by mechanisms for its enforcement, including requirements for bonds or other forms of financial security to be posted when undertaking potentially damaging activities.

APEEL notes that there are measures of this kind within existing environmental protection legislation (for example, in relation to the clean-up of pollution and remediation of contaminated sites) and that similar provisions also exist in mining legislation. It is also noted that, in the latter context, these provisions have often failed to be implemented effectively. A recent report indicates that there are more than 50,000 abandoned mines in Australia, three quarters of which have closed unexpectedly or without proper rehabilitation plans.¹³⁸ APEEL believes that the immunity that is widely enjoyed by mining and petroleum activities from the operation of state environmental legislation is no longer justifiable and that a duty to repair and restore prescribed in the next generation of environmental legislation should apply explicitly to such activities.

In proposing the prescription of a duty to repair and restore, it is appreciated that this is more likely to operate at the level of individual sites or incidents and may be less easily applied at the broader landscape and ecosystem scale that APEEL have contemplated when proposing a directing principle of environmental restoration. But it may nevertheless provide an additional regulatory tool on occasions for the implementation of strategic plans for ecological restoration, alongside the operation of this directing principle as a guide for decision-makers.

APEEL does not recommend the introduction of an additional duty based on the concept of the public trust, believing that the above measures would be sufficient to cover the same goals. Should the prescription of such a duty be contemplated, it would be necessary for some detailed guidance to be provided as to its exact scope and content for the benefit of decision-makers and the courts, so as to avoid some of the pitfalls that have been experienced with the interpretation of terms such as 'ecologically sustainable development' (as noted above).

¹³⁷ Australian Panel of Experts on Environmental Law, *The Private Sector, Business Law and Environmental Performance* (Technical Paper 7, 2017) details a range of legal reforms to business law that would encourage corporations to improve their environmental performance, including a general duty of care on all companies as well as other mechanisms.

¹³⁸ R Roche and S Judd, *Ground Truths: Taking Responsibility for Australia's Mining Legacies* (2016) Mineral Policy Institute <<https://www.acfonline.org.au/sites/default/files/resources/MPI%20mine%20rehab%20report.pdf>>.

RECOMMENDATION 1.6

The next generation of environmental laws should routinely provide for a general environmental duty to be imposed on all persons (including those undertaking mining activities) to: (1) prevent or minimise environmental harm likely to arise from their activities; and (2) to repair environmental harm they have caused and to restore ecological functions that they have impaired, to the greatest extent practicable.

6. Conclusion

This first *Technical Paper* seeks to identify the core components of environmental law that APEEL believes should constitute the foundations of the next generation of Australian environmental laws. In so doing, the paper distinguishes what it describes as the fundamental societal goal *for* environmental law from the core components *of* environmental law (which it is suggested take the form of objects, principles and norms). The lengthy discussion of the relevant societal goal canvasses the diversity of views that currently abound in relation to its possible focus and content. The paper has also critiqued the specific goal of ESD, which underpins much of the existing environmental law system in Australia. The recommendation on this matter is for the Commonwealth to initiate a new national process to review and revise the ESD goal, particularly given the length of time that has elapsed since such a process was last pursued in Australia.

The paper has also called for a more disciplined and focused approach to the prescription of objects in the next generation of Australian environmental law, particularly to ensure that there is a strong alignment between objects statements that give effect to the agreed societal goal and those statements that relate to the specific context of the particular legislation.

Finally, with respect to the important and challenging task of identifying the most significant principles of environmental law, this paper has departed from the traditional approach of cataloguing a long list of recognised principles by seeking to distinguish those principles which should serve as a guide to law-makers in designing environmental laws ('design principles') from those which should be given full force and effect by decision-makers (as rules-based principles) when implementing environmental laws ('directing principles'). In each instance, this paper has aimed to identify the most significant principles that have already been widely recognised internationally and also suggests some new principles that are emerging and which can serve to enhance the effectiveness of the next generation of Australian environmental laws.

APEEL



The Australian Panel of Experts
on Environmental Law

ENVIRONMENTAL GOVERNANCE

TECHNICAL PAPER 2

APEEL

The Australian Panel of Experts
on Environmental Law

The principal contributions to this paper were provided by the following Panel Members: Adjunct Professor Rob Fowler (principal author), with supporting contributions from Murray Wilcox AO QC, Professor Paul Martin, Dr. Cameron Holley and Professor Lee Godden.

About APEEL

The Australian Panel of Experts on Environmental Law (APEEL) is comprised of experts with extensive knowledge of, and experience in, environmental law. Its membership includes environmental law practitioners, academics with international standing and a retired judge of the Federal Court. APEEL has developed a blueprint for the next generation of Australian environmental laws with the aim of ensuring a healthy, functioning and resilient environment for generations to come. APEEL's proposals are for environmental laws that are as transparent, efficient, effective and participatory as possible. A series of technical discussion papers focus on the following themes:

1. The foundations of environmental law
2. Environmental governance
3. Terrestrial biodiversity conservation and natural resources management
4. Marine and coastal issues
5. Climate law
6. Energy regulation
7. The private sector, business law and environmental performance
8. Democracy and the environment

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Summary and Recommendations

Executive Summary

ect of environmental governance by examining the constitutional, political and legislative arrangements that govern the management of the environment in Australia. This paper is a condensed version of a fuller and more technical treatment of this subject that is presented in a separate *APEEL Environmental Governance Background Paper* (*Background Paper*). Those who wish to explore more fully the legal and policy dimensions of the recommendations presented in this *Technical Paper* should refer to the *Background Paper* for a detailed analysis of the current environmental governance arrangements, a deeper set of rationales for the recommendations proposed and a fuller description of how the proposed new approach to what APEEL has called ‘environmental federalism’ could be pursued in practice.

Both this *Technical Paper* and the *Background Paper* conclude that Australia has an environmental federalism system which is of a highly de-centralised nature in which the Commonwealth performs a relatively limited role. APEEL believe that this system, whilst it has achieved a number of beneficial outcomes, has been far from fully effective in practice. APEEL therefore urges a fundamental change to the current environmental federalism system to empower the Commonwealth to perform a strong national leadership role of a strategic nature in relation to environmental matters under the next generation of Commonwealth environmental laws. APEEL makes this recommendation because it believes the adoption of such a change will lead to improved and more dynamic outcomes than have been achieved to date under the current, decentralised system of ‘cooperative’ environmental federalism.

In urging this substantial reform, APEEL suggests there is ample constitutional authority for the performance of such a role by the Commonwealth and argue that long-standing political bargains that have resulted in the current, highly de-centralised system should be abandoned. In their place APEEL proposes a system in which a Commonwealth Environment Commission (CEC) would be responsible for developing strategic environmental instruments of both a national and regional character and for supervising the implementation of these instruments by both state governments and Commonwealth agencies. To ensure the effective implementation of these instruments at the state level, APEEL suggests the use of two mechanisms: first, the provision of direct financial assistance to the states to support their implementation of specific instruments; and second, the use of conditional pre-emption to allow for certain Commonwealth environmental laws to over-ride corresponding state laws on the same subject-matter, where states have not acted sufficiently to implement particular strategic environmental instruments. APEEL also suggests some mechanisms to ensure that the Commonwealth pursues the new strategic role proposed herein.

In advancing APEEL proposals for strategic leadership by the Commonwealth on environmental matters, APEEL have emphasised at the same time that these do not involve a substantial transfer of regulatory functions from the states to the Commonwealth and should not stifle innovative action on the environment at the state, regional and local levels. APEEL envisages that Commonwealth leadership will be essentially at the strategic level, with the states retaining their traditional regulatory functions concerning environmental and natural resources management. However, a part of the Commonwealth’s enhanced role would involve stimulating the reform of state laws and administrative arrangements where this appears desirable to achieve effective implementation of Commonwealth strategic environmental instruments. APEEL also envisages continued Commonwealth involvement in some aspects of environmental regulation and, in particular, recommends that it continues to be directly involved in the environment assessment and approval of activities involving matters of national environmental significance (MNES).

Alongside these federalism-related reforms, APEEL have canvassed some possibilities with respect to the establishment of several new Commonwealth environmental institutions. These might include a high-level CEC to administer the proposed system of Commonwealth strategic environmental instruments and a Commonwealth Environmental Protection Authority (CEPA) to perform a range of regulatory functions, including administration of the Commonwealth’s environmental assessment and approval (EAA) measures.

Finally, APEEL have also canvassed in a preliminary manner various options for the resourcing of environmental management in this country, including the many reforms advocated in both this and the other APEEL *Technical Papers*. In particular, APEEL raises the idea of establishing an Environmental Futures Fund (EFF) and also of creating a limited-term Commonwealth Environmental Investment Commission to identify strategies to generate the funds that would be allocated to this special purpose Fund.

Recommendations

RECOMMENDATION 2.1

The Commonwealth should define the nature and extent of its own role and responsibilities in relation to environmental matters; in doing so, it should:

- (i) acknowledge its responsibility for providing national strategic leadership on the environment; and*
- (ii) recognise that the states will continue to be involved in environmental regulation under state environmental laws and regulatory processes.*

RECOMMENDATION 2.2

*The Commonwealth should develop a **Statement of Commonwealth Environmental Interests (SCEI)** comprised of three broad components:*

- (i) a statement of the **functions related to the environment** that it will perform in the future, including:

the provision of strategic leadership on environmental matters;

specific aspects of environmental regulation, including environmental assessment and approval; and

the environmental regulation of activities undertaken by Commonwealth entities (whether on or outside Commonwealth land) and by other parties on Commonwealth land;*
- (ii) a statement of the **environmental matters** in which the Commonwealth has an interest, comprised of two elements:

first, a revised list of matters of national environmental significance (MNES) that will serve as triggers for the Commonwealth's environmental assessment and approval process; and

second, a revised list of additional matters besides the listed MNES with respect to which the Commonwealth could pursue a strategic leadership role; and*
- (iii) a declaration that Commonwealth leadership on environmental matters extends to the adoption of responsible and progressive negotiating positions in international negotiations on various environmental matters.*

RECOMMENDATION 2.3

*The Commonwealth, in pursuance of a national leadership role on environmental matters, should assume responsibility for the development of the following types of **Commonwealth Strategic Environmental Instruments (CSEIs)**:*

- (i) **National Environmental Measures (NEMs)**, comprising strategies, programs, standards and protocols; and*
- (ii) **Regional Environmental Plans (REPs)**, comprising terrestrial landscape-scale plans and marine regional plans.*

RECOMMENDATION 2.4

The next generation of Commonwealth environmental legislation should spell out the process for the development of Commonwealth strategic environmental instruments and provide for such instruments to be treated as 'legislative instruments' under the Legislative Instruments Act 2003 (Cth).

RECOMMENDATION 2.5

*The implementation of each Commonwealth strategic environmental instrument should be addressed at first instance by the development of an **implementation plan** by each state (and also any affected Commonwealth agency) for approval by the relevant Commonwealth environmental institution, which should also have the power to:*

- (i) develop such a plan for states that fail to do so; and*
- (ii) to accredit state environmental legislation and administrative arrangements through an approved implementation plan.*

RECOMMENDATION 2.6

The Commonwealth should pursue state cooperation with respect to the development and implementation of national strategic environmental instruments by:

- (i) providing financial assistance to the states to support their implementation efforts, and*
- (ii) using the mechanism of conditional pre-emption of state regulatory powers, in particular with respect to environmental assessment and approvals, where states fail to cooperate in the implementation of national instruments or to attain the goals, targets or standards established by such instruments.*

RECOMMENDATION 2.7

The Commonwealth should adopt specific financial assistance legislation under section 96 of the Australian Constitution that would:

- (i) tie the provision of grants to the states in relation to particular Commonwealth strategic environmental instruments to the provision by the states of acceptable State Implementation Plans (SIPs) and the carrying out of any reform initiatives prescribed therein; and*
- (ii) provide for the establishment of an Environmental Future Fund, the income from which would be used to support such grants to the states.*

RECOMMENDATION 2.8

The next generation of Commonwealth environmental legislation should provide that, where the Commonwealth considers a state has not acted sufficiently to implement a Commonwealth strategic environmental instrument, regulations may be made pursuant to the legislation to conditionally pre-empt (cf., over-ride) the operation of state environmental laws concerning:

- (i) the approval/licensing of new activities involving matters of national environmental significance (MNES);*
- (ii) the approval/licensing of other prescribed kinds of new activities; and*
- (iii) the environmental regulation of existing activities of a prescribed kind, including with respect to requiring improved environmental performance, wherever any such activity is considered by the Commonwealth to be likely to impact significantly upon the implementation of the relevant Commonwealth strategic environmental instrument.*

RECOMMENDATION 2.9

To ensure that the Commonwealth performs its responsibilities with respect to the development and implementation of national strategic environmental instruments, the following safeguards should be incorporated within the next generation of Commonwealth environmental legislation:

- (i) vesting power in a new Commonwealth Environmental Auditor to monitor the implementation by Commonwealth agencies of Commonwealth strategic environmental instruments and to make recommendations for action by such agencies where this appears necessary;*
- (ii) to allow interested parties to request the Federal Court to order the relevant Commonwealth institution (see Recommendation 2.14 (i)) to:*
 - (a) undertake the preparation of a particular strategic environmental instrument;*
 - (b) undertake the preparation of an implementation plan where a state has failed to do so with respect to a particular strategic environmental instrument;*
 - (c) activate the conditional pre-emption powers where the Court is satisfied that a state has failed to perform the tasks required of it under a State Implementation Plan (SIP); and*
- (iii) to allow parties to request the Federal Court to order non-complying Commonwealth agencies to develop implementation plans with respect to their own activities that are affected by a Commonwealth strategic environmental instrument, or to substantially perform obligations arising from their implementation plans.*

RECOMMENDATION 2.10

The next generation of Commonwealth environmental legislation, in addition to providing for mechanisms to enable the Commonwealth to pursue a strategic leadership role on environmental matters, should include the following types of other legislative arrangements, as appropriate to the particular context:

- (i) The operation of **complementary legislative schemes** (for example, through uniform legislation or an applied law scheme) where the best environmental outcomes are likely to be achieved by apportioning roles and responsibilities between the Commonwealth and the states (for example, with respect to various risk regulation processes related to chemicals, genetically modified organisms, etc.);*

- (ii) The operation of **an overlapping legislative scheme for environmental assessment and approval** (EAA) of activities that may impact significantly on matters of national environmental significance (MNES) (see also Recommendation 2.12); and
- (iii) The adoption of an **over-riding (pre-emptive) regulatory scheme** by the Commonwealth in the limited circumstances where the best environmental outcomes and market stability are likely to be achieved by such an approach (for example, in relation to motor vehicle emissions and ozone regulation).

RECOMMENDATION 2.11

The Commonwealth should review all of its existing administrative structures and regulatory functions to determine where opportunities exist to consolidate these within a new Commonwealth Environmental Protection Authority (CEPA) (see also Recommendation 2.14(ii)).

RECOMMENDATION 2.12

The Commonwealth should continue its involvement in the assessment and approval of activities that may impact significantly on matters of national environmental significance (MNES) alongside corresponding state processes, with the following reforms to the current process to be adopted:

- (i) *that consideration be given to all environmental impacts (including cumulative impacts) associated with the proposed activity, not just those related to the relevant MNES;*
- (ii) *that the current list of MNES be expanded;*
- (iii) *that responsibility for the key decisions whether to trigger the process and to approve activities made subject to the Commonwealth process be transferred from the Environment Minister to a new, independent Commonwealth environment authority.*
- (iv) *that the exemption for operations covered by a regional forestry agreement be removed; and*
- (v) *that the exclusion of offshore petroleum activities from the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) process be terminated.*

RECOMMENDATION 2.13

That the next generation of Commonwealth environmental legislation, in providing for a Commonwealth environmental assessment and approval (EAA) process, should include provision for the following measures:

- (i) *a mandatory requirement to conduct a public inquiry whenever a full environmental impact statement (EIS) is required by the Commonwealth, such inquiry to be conducted by a panel of hearing commissioners selected from a pool of scientific and other experts appointed for this purpose;*
- (ii) *for access to independent expertise to be provided to selected community representatives to assist them to present submissions to an EIS-related public inquiry;*
- (iii) *a mandatory requirement upon proponents to undertake monitoring and reporting of the environmental impacts of projects approved under the Commonwealth EAA process, together with an adaptive management approach whereby conditions attached to a project approval may be revised to address any unforeseen impacts that are disclosed by such monitoring and reporting; and*

- (iv) *an audit of previous Commonwealth-managed EISs be undertaken by a newly-established Commonwealth environmental institution to provide a contemporary evaluation of the reliability of the impact predictions made therein (see also Recommendation 2.14(ii)).*

RECOMMENDATION 2.14

To ensure the effective implementation of the next generation of Commonwealth environmental laws, the Commonwealth should establish one or more new statutory authorities to perform functions that will complement, replace and expand upon the functions currently exercised by the Minister and Department for Environment and Energy and other existing Commonwealth statutory environmental authorities, with the following possibilities in mind:

- (i) *a high-level (cf. Reserve Bank) **Commonwealth Environment Commission (CEC)** that would be responsible for: (a) administration of the system of Commonwealth strategic environmental instruments (see Recommendations 2.3-9); (b) a nationally coordinated system of environmental data collection, monitoring, auditing and reporting (including with respect to environmental sustainability indicators and trends); (c) the conduct of environmental inquiries of a strategic nature (akin to those conducted by the former Resources Assessment Commission); and (d) the provision of strategic advice to the Commonwealth government on environmental matters, either upon request or at its own initiative;*
- (ii) *a **Commonwealth Environment Protection Authority (CEPA)** that would be responsible for: (a) administration of the Commonwealth's environmental assessment and approval system, including where conditional pre-emption of equivalent state legislation has occurred (see Recommendation 2.8); (b) the regulation of activities undertaken by Commonwealth authorities or by other parties on Commonwealth land; (c) the auditing of Commonwealth-required environmental impact statements (EIS) (see Recommendation 2.13(iv)); and (d) any other environmental regulatory functions that may be appropriately assigned to the CEPA (see Recommendations 2.2 and 2.4); and*
- (iii) *a **Commonwealth Environmental Auditor** that would be responsible for (a) monitoring and reporting on the performance of CEPA, the Minister and Department for Environment and Energy and other Commonwealth bodies in relation to their performance of their statutory environmental responsibilities; and (b) providing recommendations to the CEC on the need to develop new strategic environmental instruments (see Recommendation 2.9(i)).*

RECOMMENDATION 2.15

*That the Commonwealth establish a **Commonwealth Environmental Investment Commission** that would be responsible for addressing fundamental challenges to the effective resourcing of environmental management in Australia by identifying strategies to generate increased private and public sector funding and to maximise community investment and by also establishing an **Environment Future Fund**.*

HOW TO CONTRIBUTE TO THE APEEL PROJECT

APEEL invites you to provide your responses to the ideas and recommendations presented in this paper. This will assist the development of our final proposals for the next generation of Australian environmental laws.

We look forward to your engagement on specific reform options as the APEEL journey progresses.

Please send your responses to: admin@apeel.org.au or go to www.apeel.org.au where you can do so online.

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1. Introduction

The concept of environmental governance has many dimensions. The Panel has taken the view that it is necessary to focus in this *Technical Paper* on those dimensions that are most directly relevant to the design of the next generation of Australian environmental laws. Accordingly, this paper is devoted primarily to examining the roles and responsibilities for the environment across the different tiers of government that exist within the Australian federal constitutional system. In particular, this Paper explores the avenues through which greater strategic leadership on environmental matters could be achieved and the role of environmental law in providing the settings for such leadership. This will involve a critical assessment of the current ‘cooperative’ federalism model which this paper suggests has produced an essentially de-centralised system of environmental governance in Australia that has largely failed to deliver effective outcomes. This paper will also examine related questions concerning the institutions and resources that are required to deliver effective environmental governance.¹

¹ In the *APEEL Background Paper on Environmental Governance (Background Paper)* The Panel briefly considers at the outset other dimensions of environmental governance, including the concepts of ‘new environmental governance’ and ‘shared environmental governance’, noting that these have been taken into account at various points in other *APEEL Technical Papers*.

2. Environmental federalism - establishing a new strategic role for the Commonwealth

Federalism has been widely adopted as a form of constitutional government around the globe. Besides Australia, there are currently 24 other countries that have federal constitutional systems, including the USA, Canada, Germany, Brazil, Mexico, Nigeria and Pakistan; collectively, these represent about 40% of the world's population.² In addition, the European Union (EU) involves a loose federalism model that shares elements of both a federation and a confederation. In many of these countries, and also in the EU, the question of how best to divide roles and responsibilities concerning the environment between the central (viz., federal) government and regional governments (often called states or provinces) has been the subject of considerable debate. This paper has adopted the term 'environmental federalism' to describe this topic.³

Debates concerning the most appropriate form of environmental federalism have been pursued with particular vigour in both political and academic circles in countries such as the USA and Canada, just as they have been for many years in Australia. In the USA, where the scholarship on environmental federalism is possibly the most extensive, it has been noted that:

'...environmental law is uniquely prone to federalism discord because it inevitably confronts the core question with which federalism grapples - *who gets to decide?* - in contexts where state and federal claims to power are simultaneously at their strongest'.⁴

This core question is essentially a political rather than a constitutional or legal question, although the latter context must always be borne in mind when framing political responses to it. The way in which it is answered in any particular country will depend ultimately on how much authority the central or federal level of government is able to exercise of its own accord over environmental matters, and the extent to which it is willing to exercise such authority.

In Australia, there has been a substantial and long-running debate on environmental federalism that dates back to the mid-1970s, when the Commonwealth first legislated on a range of environmental matters, including environmental impact assessment (EIA), national parks, national heritage and the Great Barrier Reef. Debates in this context have covered both the extent of the legislative capacity of the Commonwealth over the environment and the appropriateness from a policy and political perspective of Commonwealth involvement in environmental matters. This paper will examine the environmental federalism system in Australia from three distinct, but inter-connected, dimensions:

First, the **constitutional dimension**: the underlying foundation of environmental federalism is the distribution of legislative powers between the Commonwealth and the states and territories (hereinafter referred to collectively as 'states' for simplicity). In particular, this paper examines the constitutional capacity of the Commonwealth to legislate with respect to environmental matters and whether the *Australian Constitution (Constitution)* should be amended to afford greater capacity to the Commonwealth in this context;

Second, the **political dimension**: there is a distinction between the constitutional capacity of the Commonwealth to legislate for the environment and the political will to exercise this capacity. Political accords in the form of intergovernmental agreements between the Commonwealth and the states (for example, the *Intergovernmental Agreement on the Environment 1992*) have sought over many years to define their respective roles and responsibilities in a manner that limits Commonwealth involvement and recognises that the states have primary responsibility in this area. This paper critiques this 'cooperative' form of environmental federalism and suggests that the Commonwealth should assume a stronger, strategic leadership role with respect to the environment in the future, whilst also allowing the states to continue to exercise their traditional regulatory functions (provided this is done in a manner that gives effect to strategies developed by the Commonwealth); and

² *Federalism by Country*, Forum of Federations: The Global Network on Federalism and Devolved Governance, < <http://www.forumfed.org/countries/> >.

³ This term has been adopted in the same context in the United States. for a detailed survey of the experience with environmental federalism in the USA and several other countries, including Australia, see RJ Fowler, 'The Australian Experience with Environmental Federalism: Constitutional and Political Perspectives' in K Robbins (ed), *The Law and Policy of Environmental Federalism – A Comparative Analysis* (Edward Elgar Publishing, 2016) 271–303.

⁴ E Ryan, 'Environmental Federalism's Tug of War Within' in Robbins, K. (ed.), above n 3, 358.

Third, **the practical dimension:** whatever political agreements may have been reached in relation to the respective roles and responsibilities of the Commonwealth and the states, these will need to be implemented through various legal mechanisms that are deployed or reflected in Commonwealth and state environmental legislation. As noted above, these mechanisms range under the current environmental federalism system from the adoption of uniform legislation and the pursuit of complementary legislative schemes to Commonwealth legislation based upon a referral of powers by the states to the Commonwealth.⁵ This section of the paper will advance the ideas concerning how other legal mechanisms could be used by the Commonwealth to pursue a stronger strategic leadership role that would ensure effective and efficient environmental outcomes nationally.

In presenting the recommendations on the reform of the current system of environmental federalism, this paper will refer simply to 'the Commonwealth' at relevant points, without seeking to specify a specific authority or agency of the Commonwealth that would be responsible for whatever action is being recommended. This is done in order to not pre-empt the discussion that is undertaken in the next section of this paper on the need for a new Commonwealth environmental institution, or possibly more than one such institution. The paper seeks to relate that discussion to the recommendations in this section by canvassing a range of functions that APEEL believes might be vested in a new institution, or institutions, including those arising from these recommendations.

2.1 The constitutional dimension

The question of the constitutional capacity of the Commonwealth to address environmental matters has a long and contested history. Inevitably, expert opinions on this subject have changed over time, particularly in the light of High Court decisions that have tended generally to give an expansive interpretation to the powers vested in the Commonwealth Parliament to legislate on specified matters. Alongside questions as to Commonwealth legislative capacity, there also has been a question raised more recently as to the extent of the Commonwealth's ability to spend moneys for environmental and other purposes. It is necessary therefore to examine the extent to which the *Constitution* affords to the Commonwealth the capacity both to make laws and spend moneys on environmental matters.

2.1.1 The sources and limits of the Commonwealth's power to make laws regarding the environment

The vast majority of expert legal opinion supports the view that the Commonwealth has a substantial, almost plenary, capacity to make laws concerning the environment.⁶ This conclusion is based primarily upon the effect of High Court decisions handed down since the 1970s that have given an expansive interpretation to several heads of power contained in section 51 of the *Constitution* - in particular, the external affairs power (s 51 (xxix))⁷ and the corporations power (s 51 (xx)).⁸ The most important limitations that must be borne in mind when considering the exercise of these two, key Commonwealth legislative powers are:

- with respect to the external affairs power, the need for legislative measures to be sufficiently connected to the relevant treaty, and for the measures imposed to be appropriate and adapted to what is required for

5 Whilst these are the legislative tools most commonly used at present to implement 'cooperative' environmental federalism approaches in Australia, there is also the contentious administrative mechanism of accreditation of State assessment and approvals procedures by the Commonwealth via bilateral agreements which is provided for in the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act).

6 See for example, M Crommelin, 'Commonwealth Involvement in Environmental Policy: Past, Present and Future' (1987) 4 *Environmental Planning Law Journal*; JR Crawford, 'The Constitution and the Environment', 13 *Sydney Law Reform* 11, 25; J Peel and L Godden, 'Australian Environmental Management: A Dam's Story' (2005) *University of New South Wales Law Journal* 668; P Johnston, 'The Constitution and the Environment' in HP Lee and P Gerangelos (eds), *Constitutional Advancement in a Frozen Continent* (The Federation Press, Sydney, 2009) 79; GM Bates, *Environmental Law In Australia* (LexisNexis Butterworths, 8th ed, 2013) 130-155.

7 In the *Tasmanian Dam* case (*Commonwealth v Tasmania* (1983) 158 CLR 1), a narrow majority of the High Court ruled that the external affairs power enables the Commonwealth to pass laws on any subject-matter (in this instance, the protection of world heritage) where they are designed to implement a treaty to which Australia is a party.

8 The High Court's decision in the *Work Choices* case (*New South Wales v Commonwealth* (2006) 229 CLR 1) has confirmed the broad reach of the 'corporations' power, in this instance to enable the Commonwealth to cover extensively the field of industrial relations. This decision has been widely regarded as the most significant in relation to Commonwealth legislative powers since the *Tasmanian Dam* case. It lends support to earlier predictions that section 51(xx) could provide a solid constitutional basis for an expanded legislative coverage by the Commonwealth of environmental matters.

implementation of the treaty;⁹

- with respect to the corporations power, that it is unable to apply to individuals, partnerships or other entities that are not constitutional corporations.¹⁰

In addition to these two powers, there is a range of additional heads of power specified in section 51 of the *Constitution* which the Commonwealth may rely upon to support legislation on environmental matters. These include powers in relation to international and interstate trade and commerce (s 51(i))¹¹; finance and taxation (s 51(ii)); defence (s 51(vi)); quarantine (s 51(ix)); fisheries in Australian waters (s 51(x)); and the 'people of any race' (s 51(xxvi)). Also, the power to provide direct financial assistance to the states under section 96 may be used to achieve environmental objectives, a matter to which is given further attention below. Finally, reliance also has been placed by the Commonwealth more recently on the referrals power (s 51(xxxvii)), whereby the parliaments of the states may refer matters to the Commonwealth Parliament for the purpose of conferring legislative power on the latter.¹² This approach was used, for example, to bolster the constitutional validity of the *Water Act 2007* (Cth), which provided for new, centralised arrangements for the management of the Murray-Darling Basin.¹³

The prevailing academic view as to the extensive reach of Commonwealth legislative powers was reinforced in in 1999 by the Senate Environment Committee in its enquiry into Commonwealth environment powers. The Committee received some 367 submissions, reflecting the substantial interest in this matter across the Australian community, and concluded as follows:

'It is the view of the Committee that the Commonwealth Government has the constitutional power to regulate, including by legislation, most, if not all, matters of major environmental significance anywhere within the territory of Australia. The panoply of existing Constitutional heads of power confers on the Commonwealth extensive legislative competence with respect to environmental matters'.¹⁴

Whilst there seems therefore to be a preponderance of expert opinion in support of the view that the Commonwealth has extensive, almost plenary, legislative powers concerning the environment, there is a degree of caution required with respect to this conclusion, given that there are some limitations that also must be taken into consideration. These include the guarantee of freedom of trade and commerce provided by section 92 of the *Constitution* (though this has not proved a barrier to genuine environmental legislation on the part of either the Commonwealth or the states)¹⁵ and the implied prohibition against Commonwealth laws that have the effect of constraining the capacity of the states to function as governments.¹⁶ Whilst this latter doctrine has not been invoked successfully to date for the purpose of challenging a Commonwealth environmental law, a similar doctrine in the United States (the 'anti-commandeering' principle) has been applied to strike down a federal environmental law that had the effect of coercing particular action by a state.¹⁷ It may be necessary, therefore, to bear this prohibition in mind in any attempt to develop legislation that aims to deliver national strategic leadership by the Commonwealth on environmental matters, in particular by avoiding provisions that compel particular action by state governments (see further below).

9 There is also the reality that certain environmental matters may not yet be covered by a treaty, or that their coverage by treaty is the subject of lengthy and uncompleted negotiation process, or that some treaties are only 'aspirational' in nature and do not impose obligations of sufficient specificity upon which Commonwealth legislation could be based: see S Pillai and G Williams, 'Commonwealth power and environmental management: Constitutional questions revisited' (2015) *Environmental Planning Law Journal* 395, 398–400.

10 There may be some question also as to whether local councils fall within the reach of the corporations power: see Pillai and Williams, above n 9, 402.

11 The capacity of the trade and commerce power to support environmentally-focussed regulatory measures was settled by the High Court in *Murphyores Pty. Ltd. v Commonwealth* (1976) 136 CLR 1, in which a decision by the Commonwealth to ban the export of mineral sands extracted from Fraser Island in Queensland on environmental grounds was upheld. When combined with the subsequent interpretation of the corporations power, it is clear that a relatively extensive range of activities including manufacturing, mining, forestry and farming are capable of direct regulation by the Commonwealth for environmental purposes.

12 See generally with respect to the use of this power since the early 1990s A Lynch, 'The Reference Power: the Rise and Rise of a Placitum?' in P Kildea, A Lynch and G Williams (eds), *Tomorrow's Federation: Reforming Australian Government* (The Federation Press, Sydney, 2012) 193.

13 A Gardner, 'Water Reform and the Federal System' in P Kildea, A Lynch and G Williams (eds), above n 12, 269–274, suggesting that the primary constitutional basis for the *Water Act 2007* nevertheless was the external affairs power.

14 Commonwealth, *Commonwealth Environment Powers: Report of the Senate Environment, Communications, Information Technology and the Arts Reference Committee*, Parl Paper No. 133 (1999) ix.

15 See *Cole v Whitfield* (1988) 78 ALR 42; but see also *Castlemaine Tooheys Ltd. v South Australia* (1990) 169 CLR 436 for an example of the application of s 92 to invalidate a state measure, where an attempt to use the SA beverage container deposit system to apply a differential deposit to beer imported from outside the state was found by the High Court to be essentially a protective measure rather than genuine environmental regulation.

16 *Melbourne Corporation v Commonwealth* (1947) 74 CLR 31.

17 *New York v United States* 505 US 144 (1992) held invalid a federal law that required states to 'take title' to, and assume liability for, radioactive waste generated within their boundaries, on the ground that it coerced (or 'commandeered') rather than encouraged the required action.

Finally, it is important to note section 51 (xxxi) of the *Constitution*, which empowers the Commonwealth to make laws with respect to the ‘acquisition of property on just terms’. To date, the High Court has interpreted the term ‘acquisition’ in a relatively restrictive manner that appears to allow Commonwealth laws involving environmental regulation to operate without giving rise to a requirement to compensate affected property holders.¹⁸ However, as will be discussed below, this provision may potentially impact on Commonwealth financial schemes that require action by state governments that amounts to an acquisition of property.

2.1.2 The potential for Commonwealth superiority in relation to environmental regulation

The conclusion that the Commonwealth has extensive, though not plenary, powers to legislate on environmental matters raises the possibility that it could override state environmental laws by adopting legislation that essentially ‘covers the field’. This could occur under section 109 of the *Constitution*, which renders inoperative any state laws that are inconsistent with a Commonwealth law on the same subject. In the United States, where this consequence is referred to as the ‘pre-emption’ of state laws, the threat of pre-emption has been used widely in federal environmental legislation to secure state implementation of federal plans, standards and other types of policy measures. Whilst outright pre-emption has been rare in the US, a form of ‘conditional pre-emption’ has been widely adopted and applied which allows state laws to continue to operate provided that they give effect to state implementation plans approved by the federal government.¹⁹ In the examination of the practical dimension of environmental federalism below, this paper urges a new approach to Commonwealth leadership that relies in part on this American model of conditional pre-emption.

2.1.3 The spending powers of the Commonwealth

The capacity of the Commonwealth to pursue environmental objectives through the exercise of its spending powers, in particular via special purpose grants to the states and grants to the non-government sector, has been assumed and accepted for many years. However, the long-standing view that the Commonwealth can appropriate and spend money for any purpose it chooses, pursuant to sections 61 and 81 of the *Constitution*, has recently been rejected by the High Court, which has held that Commonwealth spending must be supported by one of the heads of legislative power provided in the *Constitution*.²⁰ This ruling has a particular, potential impact, on financial grants to the non-government sector for environmental purposes, which must be able to be supported by one or more specific heads of power that are thought to provide the constitutional basis for Commonwealth environmental legislation (as discussed above).

It has been suggested that recent Commonwealth environmental programs such as the Home Insulation Program and the Carbon Farming Initiative - Non Kyoto Fund and Carbon Farming Skills Program, are not supported by any head of power and hence could be struck down if challenged.²¹ Whilst most environmental programs involving payments to the non-government sector are unlikely to be legally challenged, given the benefits that they confer, it is always possible that such a challenge might be brought for other political or ideological purposes, and hence there is some level of uncertainty now attaching to some programs.

One means of resolving this uncertainty would be for the Commonwealth to make greater use of section 96 of the *Constitution*, which provides that ‘the Parliament may grant financial assistance to any State on such terms and

18 See for example, *ICM Agriculture Pty. Ltd. v Commonwealth* (2009) 240 CLR 140; *Arnold v Minister Administering the Water Management Act 2000* (2010) 240 CLR 242.

19 The classic example of this approach is the *Clean Air Act 1970* 42 USC, ch 85, section 7410 of which requires states to submit for approval by the Federal EPA state implementation plans (SIPs) specifying measures to ensure that air quality within their jurisdictions attains the National Ambient Air Quality Standards prescribed under the Act.

20 See for example, *Pape v Federal Commissioner of Taxation* (2009) 238 CLR 1; *Williams v Commonwealth* (2012) 248 CLR 156 (*William’s case*). An attempt by the Commonwealth after *William’s case* to provide a general legislative authority for its executive spending (the *Financial Framework Legislation Amendment Act (No. 3) 2012*) was rebuffed by the High Court in *Williams v Commonwealth* (2014) 252 CLR 416. The High Court ruled invalid for a second time the National Schools Chaplaincy Program, despite its listing under the 2012 legislation, on the ground that it was not supported by any head of Commonwealth power.

21 See Pillai and Williams, above n 9, 407.

conditions as the Parliament thinks fit'.²² However, this mechanism involves direct payments by the Commonwealth to the states, and the consent of the state concerned to the conditions attached. This may not always provide a convenient alternative to the provision of grants or payments directly to private parties. There is also a possible constitutional limitation on the use of section 96 to support Commonwealth environmental programs where the conditions imposed would involve the state concerned in 'acquiring' property without the provision of compensation.²³ However, it must be borne in mind, as noted above, that any such claim would depend on a finding that property has been 'acquired' under the relevant scheme, and that the High Court has maintained a relatively narrow interpretation of this term to date.²⁴

2.1.4 Conclusion regarding Commonwealth constitutional powers

Despite the various limitations on Commonwealth legislative and spending power that have been noted above, the Panel agrees with the view of the large majority of legal experts that the Commonwealth nevertheless possesses an extensive capacity to address environmental matters through both of these means if it so desires. It also has the capacity, by virtue of section 109, to exercise supremacy over state environmental laws where its legislation addresses the same subject-matter as state laws in an inconsistent manner.

The Panel's conclusion, therefore, is that the Commonwealth possesses an extensive capacity to address environmental matters through both the passing of legislation and the exercise of its spending powers, despite the various limitations noted above. It also has the capacity under section 109 to over-ride state environmental legislation by adopting its own laws that cover the field on a particular subject. However, its ability to pass environmental laws is not plenary in nature and there is a need to bear in mind, in developing the next generation of environmental laws, the various limitations that exist

2.1.5 Reform option: the possibility of amending the *Australian Constitution* to include an environment power

One means of removing any residual doubt concerning the powers of the Commonwealth to legislate on environmental matters, whilst also reinforcing its responsibility to provide national leadership in this context, would be to amend section 51 of the *Constitution* to provide explicitly for the making of laws by the Commonwealth Parliament on environmental matters. Whilst this option would have the advantage of providing clarity on this long-contested matter, it is the Panel's view (based on the preceding analysis) that it is not a necessary or essential reform in terms of enabling the Commonwealth to assume a stronger leadership role on environmental matters. The Panel believe that it is possible, from a constitutional perspective, for the Commonwealth to do so by making use of its existing powers, both to make laws and to spend, and this Paper shall set out below the proposals in this regard.

APEEL also takes the view that it is most unlikely that any proposed amendment of the *Constitution* to this effect would be likely to be pursued by the mainstream parties in the near future. Even if it were to be pursued, the Panel believe it would be unlikely to succeed, given the contention it would inevitably generate and the record of past referenda failures in such circumstances.²⁵ The Panel therefore does not support the idea of such a constitutional amendment.

22 It is clear from High Court decisions some considerable years ago that there are almost no limits on the terms and conditions that the Commonwealth may attach to such financial assistance: see for example, *South Australia v Commonwealth* (1942) 65 CLR 373. However, one possible limitation could be the implied prohibition against measures that limit the governing functions of the States (discussed above).

23 For a useful discussion of this issue, see Pillai and Williams, above n 9, 408.

24 It has been suggested that a possible Commonwealth vegetation clearance 'trigger' under the *EPBC Act* that would enable the Commonwealth to override 'lax' State native vegetation controls 'would create a very clear pathway for landholders to seek compensation under s 51(xxxi) of the *Australian Constitution*'; M Keogh, *Commonwealth vegetation trigger may open up new possibilities for farmers* (28 April 2016) Farm Institute <<http://www.farminstitute.org.au/ag-forum/commonwealth-vegetation-trigger-may-open-up-new-possibilities-for-farmers>>. This comment is referring to a situation in which s109 would be relied upon to enable the over-riding of state legislation, but a similar argument might be advanced where Commonwealth funding under s96 is being provided to secure action under State vegetation controls that is found to amount to an 'acquisition' of property. However, it is still far from clear that compelling the retention of native vegetation for the purposes of biodiversity protection or to help the achievement of greenhouse gas emissions reduction targets constitutes an 'acquisition' of property under s 51(xxxi) that would, in turn, constrain the use of section 96 for such a purpose.

25 Of forty-four referendums to amend the *Constitution* held since 1901, only eight have been successful.

2.2 The political dimension

Given that environmental management is the subject of strong competing claims to power within many federal constitutional systems, the form of environmental federalism that is adopted within any particular country ultimately will be the result of political choices made either unilaterally by the federal government (through full or partial pre-emption of state laws) or on a joint basis by both federal and state/provincial governments, acting collaboratively or, at times, in conflict with each other. The political dimension therefore is just as important as the constitutional dimension in the determination of the form of environmental federalism that is adopted within any particular country.

Federalism allows for political choices to be made between different models that collectively comprise a 'spectrum' ranging from the full centralisation of power at the federal level to an essentially de-centralised system in which the federal level exerts little or no influence. It is important to understand that environmental federalism does not involve a 'zero sum' game in which a political choice must be made between wholly centralised or de-centralised models.²⁶ Instead, there is a wide range of choice between different environmental federalism models within the central part of the environmental federalism spectrum that involves varying degrees of centralised and de-centralised arrangements. The term 'cooperative federalism' has been employed frequently to describe many of these models. However, this is a particularly elastic term that is often applied unquestioningly to a variety of models that can vary considerably in their nature and the Panel considers it serves little useful purpose in terms of categorising particular forms of environmental federalism.

The approach that will be adopted in the following section is to provide an overview of the most significant political elements of Australian environmental federalism to determine where this system sits in the so-called federalism spectrum.²⁷ This paper will then consider two specific issues: first, the general arguments of a values-based and theoretical nature that have been advanced for predominantly centralised and de-centralised environmental federalism systems respectively, both in Australia and elsewhere; and second, how successful the current Australian system has been in securing effective environmental outcomes. The paper will conclude by recommending that the Commonwealth should make the political decision to adopt a new strategic leadership role on environmental matters and reflect this in a Statement of Commonwealth Environmental Interests (*SCEI*).

2.2.1 Description of the current system

There are four distinct, but related, elements of the politically-based cooperative approach to environmental matters that has evolved in Australia:

- first, there has been a reliance on **intergovernmental forums** in which cooperative approaches have been regularly developed via negotiations between the Commonwealth and state governments;
- second, **intergovernmental agreements** have been developed through these forums for the purpose of defining the roles and responsibilities of the Commonwealth and the states with respect to environmental matters (and also to address particular aspects of environmental management more specifically);
- third, a wide range of **national strategies** has been developed, again through intergovernmental forums, often leading to the adoption of both Commonwealth and state legislation to give legal effect to these instruments; and
- fourth, there have been Commonwealth-funded **programs of financial assistance** directed at both the states and non-government actors.

The combined effect of the intergovernmental agreements and national strategies developed through intergovernmental forums has been to achieve through political processes a more limited role for the Commonwealth

²⁶ For the same viewpoint, see E Ryan, above n 4, 359: '...the broader federalism discourse is increasingly recognizing environmental federalism for lighting a path away from the entrenched 'zero-sum' model, which treats every assertion of authority at one jurisdictional level as a loss of authority for the others'.

²⁷ In the *Background Paper*, the Panel provides a comparative survey of other environmental federalism systems, including the USA and Canada, and conclude that the Australian system is relatively de-centralised in character, very much alike the situation in Canada.

regarding environmental matters than is possible legally, given its substantial constitutional capacity in this context. In effect, potential Commonwealth supremacy in this field has been made subject, through political processes, to an acceptance by the Commonwealth of state primacy.

2.2.1.1 Intergovernmental forums (COAG, Ministerial Councils and the NEPC)

Since its establishment in 1992, the over-arching body for inter-governmental relations in Australia has been the Council of Australian Governments (COAG), comprised of the Prime Minister, the state Premiers and territory Chief Ministers, and the President of the Local Government Association of Australia (ALGA).²⁸ COAG has addressed a wide range of environmental matters, including salinity and water quality, the Murray-Darling Basin, a renewable energy target and national energy efficiency standards. In many instances, the outcomes from its deliberations have been reflected in an intergovernmental agreement or a national strategy.

COAG has become an umbrella for a Ministerial Council system which was well-established prior to its creation. In relation to environmental matters, this dates back to the establishment of the Australian Environment Council (AEC) in 1972. The AEC morphed into other forms over the following years,²⁹ eventually becoming the Standing Committee on Environment and Water (SCEW) in 2010. This long tradition of using specialist Ministerial Councils to address environmental matters collaboratively across jurisdictions came to an end in December 2013, at the first meeting of COAG following the election of the Abbott Coalition government. At this meeting, the Commonwealth insisted upon a reorganisation of COAG Ministerial Councils to reduce their number from 22 to 8, resulting in the abolition of SCEW.³⁰ This means that, for the first time in over forty years, there is no longer a formal intergovernmental forum specifically dedicated to the discussion of collaborative national approaches to environmental matters, apart from the National Environment Protection Council (NEPC).

The NEPC is somewhat unique as an intergovernmental environmental forum in that it was formally established through uniform legislation adopted by the Commonwealth and the states in 1995. Since then, it has developed a small number of instruments known as National Environment Protection Measures (NEPMs).³¹ Given its statutory mandate, the NEPC has continued to exist after the abolition of many other Ministerial Councils, including SCEW, by COAG. This paper examines the effectiveness of the NEPC scheme below.

With the demise of SCEW, informal meetings of Commonwealth and state Environment Ministers (referred to as MEMs) have been convened subsequently. These have taken the form of one day meetings held roughly on an annual basis.³² The initial agenda for these meetings has focused on a national review of environmental regulation ‘to identify unworkable, contradictory or incompatible regulation’,³³ culminating in the release in mid-2015 of the *Interim Report of the National Review of Environmental Regulation*.³⁴ The clear focus of this work has been ‘avoiding unnecessary duplication between levels of government and encouraging innovation and efficiency’,³⁵ thus reflecting an agenda driven by the Commonwealth of reducing so-called ‘green tape’.³⁶

28 For a detailed review of the operation of COAG, see Commonwealth, *COAG and Federal Financial Relations: Department of Prime Minister and Cabinet Reform of the Federation White Paper*, Issue Paper No. 5 <<http://apo.org.au/node/56126>>.

29 These were the Australian and New Zealand Environment and Conservation Council (ANZECC), from 1990 to 2001, and the Environment Protection and Heritage Council (EPHC), from 2001 to 2010.

30 The announcement of the abolition of SCEW may be found on its website, which currently is being maintained for historical purposes: National Environment Protection Council <www.scew.gov.au/>.

31 The *National Environment Protection Council Act 1994* (Cth) s 14(3) provides that NEPMs may take the form of standards, goals, guidelines or protocols, each of which is defined in the Act. Matters addressed by NEPMs include air toxics; ambient air quality; assessment of site contamination; diesel vehicle emissions; movement of controlled wastes; a National Pollutant Inventory and used packaging. For a critique, see RJ Fowler, ‘Law and Policy Aspects of National Standardisation’ in B Boer, RJ Fowler and N Gunningham (eds), *Environmental Outlook No. 2: Law and Policy* (Federation Press, Sydney, 1996) 318.

32 See for example, *Meeting of Environment Ministers* (25 November 2016) Australian Government Department of the Environment and Energy, <<https://www.environment.gov.au/about-us/mem>>.

33 Minister for Environment, Greg Hunt MP, ‘Getting environmental regulation right across Australia’ (Media Release, 19 March 2015) available at <<http://www.environment.gov.au/minister/hunt/2015/mr20150319a.html>>.

34 *National Review of Environmental Regulation Interim Report* (26 February 2015) Australian Government Department of the Environment and Energy, <<https://www.environment.gov.au/about-us/mem/environmental-regulation-review>>.

35 Ibid.

36 The reflection of this agenda in the Commonwealth’s ‘One-Stop-Shop’ initiative will be discussed further below, this paper considers the role of the Commonwealth with respect to environmental assessment and approvals under the *EPBC Act*.

Meanwhile, the six COAG meetings held since December 2013 have not devoted attention to any environment-related matters (apart from the subject of deregulation) until the most recent one held on 16 December 2016, where some discussion occurred with respect to implementation of the Murray-Darling Basin Plan and the need for better regulation of per- and poly-fluoroalkyl substances (PFAS) contaminants.³⁷ Thus, to a large extent, with the abolition of SCEW, environmental matters have disappeared from the agenda on this highest level of the national stage.

2.2.1.2 Intergovernmental agreements

The Australian cooperative federalism model has found its fullest expression through the development of intergovernmental agreements. Whilst such agreements may sometimes be formally endorsed by COAG, many others may be adopted through other avenues, including Ministerial Councils.³⁸ Of particular significance in this regard are two intergovernmental agreements adopted by COAG in the 1990s which were not directed at specific environmental issues, but instead at defining the respective roles and responsibilities of the Commonwealth and the states concerning environmental matters. The most comprehensive of these political accords is the *Intergovernmental Agreement on the Environment (IGAE)*,³⁹ which was adopted in May 1992; and the 1997 *Heads of Agreement on Commonwealth and State Roles and Responsibilities for the Environment (HOA)*, which focuses primarily on the area of environmental assessment and approvals and provided the blueprint for the Commonwealth's *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)*.⁴⁰ These are somewhat unique applications of the intergovernmental agreement mechanism and they have had a significant impact in terms of quashing any political contemplation of a more expansive Commonwealth role in environmental management since their adoption.⁴¹

Other intergovernmental agreements have addressed specific aspects of environmental management, rather than broader jurisdictional matters and often have been reflected in, or even appended to, related Commonwealth environmental legislation. Unfortunately, there is no single repository for these various agreements. An interesting example of the use of intergovernmental agreements is in relation to climate change adaptation, where collaborative approaches have been agreed through the National Climate Change Adaptation Framework,⁴² the *National Climate Resilience and Adaptation Strategy*,⁴³ and two COAG Select Council on Climate Change resolutions (one establishing a set of national adaptation priorities,⁴⁴ the other defining government roles and responsibilities in managing and allocating climate change risks).⁴⁵

2.2.1.3 National strategies

The Commonwealth and the states also have developed an array of national strategies on a wide range of topics, including ecologically sustainable development (ESD), Australia's Natural Reserves System (NRS), climate change,

37 Council of Australian Government meeting Communique\ (9 December 2016) Council of Australian Governments <<http://www.coag.gov.au/meeting-outcomes/coag-meeting-communique%C3%A9-9-december-2016>>.

38 For a discussion of the constitutional capacity of the Commonwealth to enter into intergovernmental agreements see for example, C Saunders, 'Intergovernmental Agreements and the Executive Power' (2005) *Public Law Review* 294; *R v Duncan; Ex parte Australian Iron and Steel Pty Ltd* (1982) 158 CLR 535, 560 (Mason J).

39 *Intergovernmental Agreement on the Environment* (1 May 1992) Australian Government Department of the Environment and Energy, <<https://www.environment.gov.au/about-us/esd/publications/intergovernmental-agreement>>.

40 *Heads of agreement on Commonwealth and State roles and responsibilities for the Environment*, (1996), Council of Australia Governments, <www.environment.gov.au/resource/heads-agreement-commonwealth-and-state-roles-and-responsibilities-environment>.

41 See below for further analysis of the current political arrangement; for a detailed examination of the provisions of these two intergovernmental agreements see for example, *Background Paper*.

42 Commonwealth of Australia, 'National Climate Change Adaptation Framework' Department of Climate Change and Energy Efficiency Department of Climate Change and Energy Efficiency, Commonwealth Parliament, *National Climate Change Adaptation Framework* (2007) 3.

43 Commonwealth of Australia, 'National Climate Resilience and Adaptation Strategy' (Strategy document, Department of the Environment and Energy, Commonwealth Parliament, *National Climate Resilience and Adaptation Strategy* (2015).

44 Council of Australian Governments Select Council on Climate Change, 'National Adaptation Priorities' *Council of National Climate Resilience and Adaptation Strategy*, Council of Australian Governments Select Council on Climate Change (2015) <<https://www.environment.gov.au/system/files/resources/3b44e21e-2a78-4809-87c7-a1386e350c29/files/national-climate-resilience-and-adaptation-strategy.pdf>>.

45 *Roles and Responsibilities for Climate Change Adaptation in Australia*, Council of Australian Governments Select Council on Climate Change (4 May 2012) <<http://archive.southerncouncils.nsw.gov.au/issues/climate-change/council-of-australian-government-coag-select-council-on-climate-change/>>. Some additional agreements not described in the text above include the agreements that have provided the framework for the *Water Act 2007* (Cth). See also *Intergovernmental Agreement on Implementing Water Reform in the Murray Darling Basin* (27 November 2015) Council of Australian Governments <<https://www.coag.gov.au/about-coag/agreements/intergovernmental-agreement-implementing-water-reform-murray-darling-basin>>; *Gene Technology Agreement* (3 July 2008) Council of Australian Governments <<http://www.coag.gov.au/about-coag/agreements/gene-technology-agreement>>; *Intergovernmental Agreement on Biosecurity* (2012) Department of Agriculture and Water Resources <<http://www.agriculture.gov.au/biosecurity/partnerships/nbc/intergovernmental-agreement-on-biosecurity>>; *National Environmental Biosecurity Response Agreement* (January 2012) Department of Agriculture and Water Resources <<http://www.agriculture.gov.au/biosecurity/emergency/nebra>>.

oceans, forests and the conservation of biological diversity.⁴⁶ One particular strategy that deserves special mention is the *National Strategy for Ecologically Sustainable Development (NSED)*, which was adopted by COAG in June 1992.⁴⁷ The basic purpose of the *NSED* is stated as follows:

‘... to set out the broad strategic and policy framework under which governments will cooperatively make decisions and take actions to pursue ESD in Australia’.⁴⁸

It is a matter of considerable contention as to whether the *NSED* has met its fundamental goal of achieving ‘development which aims to meet the needs of Australians today, while conserving our ecosystems for the benefit of future generations’.⁴⁹ The rate at which biodiversity in Australia continues to decline suggests a substantial failure on this score.⁵⁰ In Australian Panel of Experts on Environmental Law, *The Foundations for Environmental Law: Goals, Objects, Principles and Norms* (Technical Paper 1, 2017), the Panel explores this subject in much greater detail and recommends that the Commonwealth should establish a process to develop a new goal in place of the *NSED*.

National strategies are entirely political in nature and have no legal force or effect. Furthermore, and most significantly, there is no specific mechanism for securing their implementation. Instead, it is envisaged by governments that this will be achieved collaboratively through the operation of state and Commonwealth legislation and related administrative action. In this respect, national strategies reflect clearly the highly consensus-based, collaborative form of environmental federalism that has been pursued in Australia.

2.2.1.4 Programs for Commonwealth financial assistance

There is a broad range of Commonwealth programs that provide financial resources to both state governments and non-government parties in support of environment-related activities. These are canvassed in some detail in the *Background Paper*. The National Commission of Audit Second Phase Report on *Towards Responsible Government* identified ten such programs that were operating in 2015, with a collective value of \$297 million (see Annexure C of this Report). Whilst these programs are generated by the Commonwealth rather than through inter-governmental forums (as in the case of national strategies), their design and implementation often involves engagement by the Commonwealth with state governments, and sometimes also with regional and local authorities. They therefore provide a means by which the Commonwealth can seek to influence environmental management at the state, regional and local levels of government, although the amount of funds being made available by the Commonwealth has declined significantly since 2013.

2.2.2 Analysis

The political arrangements described in the preceding section allow little scope for leadership at the central level. The development of national strategies and standards is undertaken through intergovernmental forums, whilst planning controls, environmental regulation and natural resources management are predominantly handled at a de-centralised level (state, regional and local). The political understandings reached a quarter of a century ago in the *IGAE* essentially remain intact. Clause 2.2.1 of the *IGAE* identifies only a limited role for the Commonwealth in relation to matters of foreign policy on the environment, ensuring state policies and practices do not result in external effects, and facilitating the development of national environmental standards (through the NEPC). The Commonwealth has largely abided by this restrictive definition by refraining from taking a leadership role in relation to environmental issues, preferring instead to seek consensus with the states on any national initiatives of a strategic or policy nature.

46 For a fuller list, see Bates, above n 6, 166.

47 *National Strategy for Ecologically Sustainable Development – Part 1 Introduction* (December 1992) Australian Government Department of the Environment and Energy <www.environment.gov.au/about-us/esd/publications/national-esd-strategy-part1>.

48 *What does the National Strategy for ESD Contain?* (December 1992) Australian Government Department for the Environment <www.environment.gov.au/about-us/esd/publications/national-esd-strategy-part1>.

49 Ibid.

50 EG Ritchie et al., ‘Continental-Scale Governance Failure Will Hasten Loss of Australia’s Biodiversity’ (2013) 27 *Conservation Biology* 1133.

On the other hand, the primacy of the states is reflected in clause 2.3.2 of the *IGAE*, which provides that: ‘Each State has responsibility for the policy, legislative and administrative framework within which living and non-living resources are managed within the State’, and also in Schedule 2, which provides that the states have responsibility for ‘resource assessment, land use decisions and approval processes’. These clauses reinforce the view that the states have the primary role and responsibilities with respect to the regulation of the environment.⁵¹

APEEL is therefore of the view that it is appropriate to describe the Australian environmental federalism system as being highly de-centralised in character. The detailed comparison of this system with those of other countries which is undertaken in the *Background Paper* serves to reinforce this conclusion. APEEL believes this conclusion gives rise to a fundamental question as to whether environmental governance could be improved by having a more centralised system of environmental federalism in Australia. The Panel notes that in areas of economic regulation such as taxation, corporations, trade practices and securities and investment, the Commonwealth has been prepared to test its legislative capacity to the full by adopting comprehensive legal schemes, whereas in relation to environmental management it has largely accepted the limited role and responsibilities recognised for it in the *IGAE*. Why a similar approach should not be adopted in the future with respect to environmental management is a matter that APEEL believes deserves serious attention.

The Panel does not assume that centralisation is a preferable model of environmental federalism, and in recognition of the point made above, considers there is no ‘one size fits all’ model of environmental federalism that should cover all aspects of environmental management. But the Panel considers it is appropriate to question whether the heavily de-centralised system that is described above should be re-designed with a view to vesting a stronger, leadership role in the Commonwealth. This paper will examine this possibility from two perspectives: first, by considering the arguments that have been regularly advanced for and against a more centralised approach to environmental federalism - both in the scholarly literature and also in political discourse; and second, by considering how effective the existing de-centralised Australian system has been in delivering sound environmental outcomes.

2.2.2.1 The arguments for a centralised model of environmental federalism

There are several arguments which have been regularly advanced in the American literature on environmental law and federalism in support of a more centralised system of environmental federalism that encompasses both policy and regulation. This paper turns to these sources in this regard as there has been far less consideration of this topic in Australian federalism scholarship. The key arguments have been succinctly summarised by Glicksman and Levy as follows:

‘...the traditional justifications for federal environmental regulation reflect commonly understood collective action problems, including negative environmental externalities, resource pooling, the “race to the bottom”, uniform standards and the “NIMBY” phenomenon’.⁵²

Despite their American sourcing, each of these arguments has some resonance in the Australian context also. This paper only briefly summarises them here. For a more detailed analysis, refer to the *Background Paper*.

The **externalities** argument reflects a recognition that environmental impacts (particularly from air and water pollution) do not respect state boundaries and can be experienced beyond the state in which they are generated, thereby demanding federal regulatory action.⁵³ As noted above, the *IGAE* also acknowledges the role of the Commonwealth in this particular context.

51 As this paper will show below, when it overviews the practical dimension of environmental federalism, this is also clearly reflected in the scope of Commonwealth environmental legislation (see Appendix 1). Whilst extensive in number, Commonwealth environmental laws generally do not overlap with, or pre-empt, corresponding State legislation and have an operation that is largely confined to areas of existing Commonwealth jurisdiction. The major exception is the environmental assessment and approval scheme that operates under the *EPBC Act*, which also will be examined in more detail below.

52 RL Glicksman and RE Levy, ‘A Collective Action Perspective on Ceiling Pre-emption by Federal Environmental Regulation: The Case of Global Climate Change’ (2008) 102 *North-western University Law Review* 579, 593–4.

53 See for example, RL Revesz, ‘Federalism and Interstate Environmental Externalities’ (1996) 144 *University of Pennsylvania Law Review* 2341.

The concept of **resource pooling**, sometimes also referred to as ‘economies of scale’, is based on a recognition that superior federal resources can result in efficiencies in the generation of scientific and technical information. Hence, federal leadership is considered to be warranted where it will generate scientific information that can underpin effective environmental regulation in a way that the states are unable to match when acting alone.⁵⁴

The ‘**race to the bottom**’ theory is based on the assumption that states will be inclined to relax their environmental standards from time to time in order to attract investment by business or industry, so as to generate economic benefits and resource revenues.⁵⁵ From an Australian perspective, it can be argued to have strong relevance in the light of the high level of vertical fiscal imbalance that exists in this country, which can induce states to promote resource development at the expense of environmental standards as a means of enhancing revenues and economic growth. Whilst a competitive ‘race to the bottom’ in which states are actively endeavouring to provide the least stringent environmental obligations for industry may not be evident, there is certainly ample evidence of a preparedness on the part of most states to ease off or wind back environmental regulation under pressure from industries within their respective jurisdictions from time to time.

The rationale of **uniformity** is based on the premise that a single, federally-designed standard will provide more efficient and effective direction to industry and other regulated parties than can a range of differing state-based standards. However, in Australia, this outcome has been pursued by efforts to achieve uniformity via harmonisation of state measures, thereby reinforcing the de-centralised approach to such matters. Saunders notes the strong connection between the uniformity goal and cooperative approaches in Australia:

‘Australian federalism is distinguished by the extent to which uniformity is assumed to be the objective of cooperation, which is deemed to have failed if the requisite degree of uniformity is not achieved’.⁵⁶

It is equally plausible to argue that uniformity can be provided by a scheme in which the Commonwealth establishes uniform national standards. The Panel believe that the goal of uniformity with respect to environmental standards could be achieved more effectively through Commonwealth action than through the de-centralised cooperative approach embodied in the NEPC structure. This paper returns to this question below, when it considers the effectiveness of the current Australian system of environmental federalism.⁵⁷

The ‘**NIMBY**’ (**not in my backyard**) argument has been advanced in the United States in support of federal environmental regulation in order to address the problem of states seeking to avoid having environmentally-damaging activities such as radioactive or toxic chemical waste treatment facilities located within their boundaries. In Australia, as in the United States, such proposals have spawned heated political debate and intense community concern, leading often to a paralysis with respect to the establishment of such facilities. Glicksman and Levy note that, in the USA:

‘Congress has often reacted by establishing federal standards or otherwise taking the power to exclude objectionable facilities out of the hands of state and local decision-makers’.⁵⁸

Whether similar measures would be appropriate in Australia is a question that this paper leaves open at this stage for further consideration. The Panels primary argument is that Commonwealth leadership should be focused on the

54 Glicksman and Levy, above n 52, 596 (noting that this argument only justifies a federal role in generating information and disseminating it to the states and does not provide strong support for federal regulation on the basis of such information).

55 This particular theory has been the subject of some strong debate amongst American commentators. See for example, RL Revesz, ‘Rehabilitating Interstate Competition: Rethinking the “Race to the Bottom” Rationale for Federal Environmental Regulation’ (1992) *New York University Law Review* 1210; J Adler, ‘Jurisdictional Mismatch in Environmental Federalism’ (2005) 14 *New York University Environmental Law Journal* 130. However, the prevailing view still appears to be in support of its underlying premise: see for example, Glicksman and Levy, above n 52, 598; K Engel, ‘State Environmental-standard Setting: Is There a “Race” and Is It “To the Bottom?”’ (1997) 48 *Hastings Law Journal* 271.

56 C Saunders, ‘Cooperative Arrangements in Comparative Perspective’ in G Appleby, N Aroney and T John (eds), *The Future of Australian Federalism: Comparative and Interdisciplinary Perspectives* (Cambridge University Press, 2012), 414.

57 There is a question that inevitably arises with respect to the setting of national standards as to whether they would normally operate as a ‘floor’ rather than a ‘ceiling’ - that is to say, whether the states would remain free to impose stricter standards in particular circumstances or, alternatively, would be bound to apply the federally-devised standards in all instances. APEEL believe that Commonwealth-devised standards should operate normally as a ‘floor’ that may be exceeded by the states, thus providing a minimum level of protection for all citizens.

58 Glicksman and Levy, above n 52, 601.

development of national strategies. Whether the Commonwealth should also have an over-riding approval power in such circumstances is a separate, and contentious, question.

The Panel believe there is a further argument that is particular to the Australian situation that may be advanced in support of centralised strategic leadership by the Commonwealth. The implementation of treaty obligations in Australia normally requires that there be legislation in place specifically addressing such obligations prior to ratification by the Commonwealth.⁵⁹ This may be Commonwealth legislation, but it may also often involve a matter that state legislatures will need to address. As a result, ratification of particular treaties can be delayed for considerable periods of time whilst negotiations proceed with the states regarding the development of the necessary state legislation.⁶⁰ If the Commonwealth, following the signing of an environment-related treaty, was able to develop a national strategy on the relevant subject-matter that the states were then encouraged by various means to implement, delays in treaty ratification might be significantly reduced. In addition, state measures for the implementation of treaty obligations might also be more extensive and effective.⁶¹

Despite these extensive arguments in support of a more centralised form of environmental federalism, it must be acknowledged that in recent years there has been a strong surge of political support for decentralised governance more generally. This has been reflected, for example, in a growing disaffection in the United States with many aspects of the US federal government that appears to have contributed in the past year to the election of Donald Trump as President, and also in the 'Brexit' vote by the United Kingdom to leave the EU. Despite the long history in the United States of federal leadership on environmental matters, the Trump administration appears intent on significantly reducing federal involvement in environmental management and leaving much great responsibility with the states. This paper therefore turns to examine the arguments in favor of a more decentralised system of environmental federalism, beginning with an examination of the subsidiarity principle which has often been invoked in this context.

2.2.2.2 The arguments in favor of a more decentralised system of environmental federalism

The Commonwealth has identified the subsidiarity principle as a major driver in the establishment of COAG, offering up a version of the principle that states that 'functions should be performed by the lowest level of government competent to do so'.⁶² This somewhat distorted version of the subsidiarity principle can be compared with the classic definition of the principle in the *Treaty on the European Union 1992*, which allows for the exercise of shared governance functions at the Union level where 'the proposed action cannot be sufficiently achieved by the Member States, either at central or at regional level, but can rather, by reason of the scale or effects of the proposed action, *be better achieved* at Union level'⁶³ (emphasis added). The critical consideration in applying this version of the principle therefore is one of effectiveness - that is to say, it calls for a consideration of where within the relevant tiers of government a particular action can be more effectively achieved. In practice, the subsidiarity principle has not prevented the development of an extensive range of Environmental Directives at the Union level, thus reflecting a broad acceptance within the EU that a centralised approach to environmental policy formulation is consistent with the operation of the principle, whilst allowing also for the implementation of Directives at the national, regional and local levels as appropriate.

Nicholas Aroney suggests that the subsidiarity principle specifically allows for such a centralised approach where local jurisdictions are tempted 'to under-regulate activities the costs of which are borne by other jurisdictions (for example,

59 See for a full example, *Treaty-making process*, Australian Government Department of Foreign Affairs and Trade <<http://dfat.gov.au/international-relations/treaties/treaty-making-process/pages/treaty-making-process.aspx>>.

60 See for example of a delay in ratification by Australia of an international environmental treaty, J Prest, 'Why won't Australia ratify an international deal to cut mercury pollution?', *The Conversation* (online), 18 November 2016, <<https://theconversation.com/why-wont-australia-ratify-an-international-deal-to-cut-mercury-pollution-68820>>.

61 Such an approach would reinforce Recommendation 2.2 below concerning the role of the Commonwealth with respect to Australia's stance in international negotiations on environmental matters.

62 Commonwealth of Australia, *Reform of the Federation White Paper: A Federation for Our Future: COAG and Federal Financial Relations*, Issues Paper 5 (2014) 5. Note that this is a distorted prescription of the precautionary principle that offers little or no guidance in practice, given that 'competency' is often a contested issue in federal systems (and especially so with respect to environmental matters).

63 *Treaty on European Union*, opened for signature 7 February 1992, [2009] OJ C 115/13 (entered into force 1 November 1993) art 5.3, available at <<http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:12012M/TXT&from=en>>; see also *Protocol on the Application of the Principles of Subsidiarity and Proportionality* [1997] OJ C 340/150; *Protocol (No. 2) on the Application of the Principles of Subsidiarity and Proportionality* [2010] OJ C 83/206.

pollution)⁶⁴ and that ‘the principle of subsidiarity suggests that federal governments are sometimes better situated to address such issues by virtue of their larger resources, economies of scale, and the like’.⁶⁵ These observations clearly reflect some of the arguments previously outlined in support of centralised environmental regulation.

Looking beyond the subsidiarity principle, a number of additional arguments have been advanced in support of a decentralised approach to environmental governance. These arguments appear to fall broadly into three categories: legitimacy, innovation and efficiency, with the third of these having been advanced most commonly in Australia.

The **legitimacy argument** arises from a perception that centralised governments are distant from the citizenry and an assumption that representative democracy is best accomplished when policy solutions are tailored to meet local concerns and citizen preferences.⁶⁶ It also assumes that there is a greater capacity to influence policy when it is developed at a decentralised level, and that there are greater opportunities for citizen participation in these circumstances.⁶⁷ In considering these views, the Panel believe it is relevant to take into account the views of the community in relation to the preferred governance arrangements for the environment, which seem often to favor a centralised approach. In Australia, the 2014 Constitutional Values Survey conducted by Griffith University asked some 1200 people the question: ‘Who should be responsible for protecting the environment’? Almost 45% of those polled indicated the Commonwealth should be solely responsible (compared to just 16% supporting sole state responsibility) and almost 73% felt the Commonwealth should be at least partly responsible (compared to almost 46% in support of the states having at least a part responsibility).⁶⁸ Given this overwhelming weight of opinion within the Australian community in support of Commonwealth involvement in environmental governance, it is difficult to accept that the legitimacy argument offers any clear justification for the current environmental federalism arrangements in this country.⁶⁹ Rather the evidence is that there is strong public support for an enhanced leadership role on the part of the Commonwealth in relation to environmental matters.

Turning to the **innovation argument** in support of decentralised environmental governance, there is a plausible rationale that states should be allowed to engage in novel social and economic experiments without being constrained by federal standards or policies.⁷⁰ The Panel are of the view that centrally-designed standards should serve generally as a floor rather than a ceiling so as not to stifle innovative environmental initiatives at the state, regional or local level; the exception being where significant economic and market impacts may arise from allowing states to adopt tougher standards. But the Panel also notes that the innovation argument may be stronger in theory than in practice, insofar as there is little evidence to support its application in circumstances where decentralised environmental governance has been the norm. Weinbust is particularly dismissive of the innovation argument in her comparative review of environmental federalism systems in several countries:

‘In environmental regulation, there is little evidence that sub-national governments with more autonomy will be more innovative. On the contrary, the evidence points to the conclusion that less centralized systems are less innovative and there is no inevitable diffusion of those innovations that do occur’.⁷¹

The **efficiency argument** has been advanced regularly by both governments and industry in Australia in support of a decentralised system of environmental federalism. The arguments usually focus on a perceived need to remove duplication and/or unnecessary overlap between Commonwealth and state environmental regulation in order to

64 N Aroney, ‘Federalism and Subsidiarity: Principles and Processes in the Reform of the Australian Federation’, (2016) 44(1) *Federal Law Review* 1, 3.

65 Ibid 3–4.

66 See R M Verchick and N Mendelson, ‘Pre-emption and Theories of Federalism’, in W B Buzbee (ed), *Pre-emption Choice – The Theory, Law and Reality of Federalism’s Core Question* (Cambridge University Press, 2009) 13, 16–19.

67 For a discussion and questioning of these assumptions, see I Weinbust, *Green Leviathan: The Case for a Federal Role in Environmental Policy* (Routledge, 2nd revised ed, 2013), 14–17.

68 Griffith University, *Australian Constitutional Values Survey 2014*, 12. It should be noted that these responses were despite 51.8% of those polled indicating that they felt it was better ‘for decisions to be made at the lowest level of government competent to deal with the decision’ (at 11). This provides a clear indication that whilst the subsidiarity principle has reasonable support within the Australian community, it is not seen as supportive of a decentralized system of environmental governance in this country.

69 The Panel distinguishes here the strong level of support evident for stronger Commonwealth leadership on the environment from the level of support needed to secure an amendment of the *Constitution* by way of a referendum to formally vest power in the Commonwealth to legislate on environmental matters. As noted above, given the history of failed referenda in Australia, it cannot be assumed that the support identified in the Constitutional Values Survey would translate into the necessary majority of votes required for a successful referendum.

70 Verchick and Mendelsohn, above n 66, 19.

71 Weinbust, above n 67, 22.

reduce allegedly excessive compliance costs for business and industry.⁷² There has been long-standing criticism of the Commonwealth's involvement in environmental assessment and approval processes based on these arguments (which this paper addresses further below), but there has also been frequent resort to the efficiency argument to justify various other schemes that have been designed to reduce Commonwealth involvement in environmental governance. In almost every instance, there has been a twofold reference in relevant government documents to both efficiency and **effectiveness** as joint justifications for such schemes, on the apparent assumption that these two objectives go hand in hand. This paper deals with the question of effectiveness separately below.

The invocation of efficiency and effectiveness has become virtually a mantra in Australia that is repeated unquestioningly by governments and industry in support of de-centralised approaches to environmental management. In the process, governments have regularly accepted or been significantly influenced by arguments advanced by industry and business representatives concerning the costs of duplication and unnecessary overlap. These arguments appear often to have a specious foundation. For example, a 2013 Senate Inquiry into the *EPBC Act* found, after careful examination, that there was no clear evidence to support assertions made to it by industry groups in this regard:

'The committee rejects the claims made by business interests that Commonwealth powers of approval are the cause of inefficiencies, delays, and loss of income to project proponents'.⁷³

Correspondingly, there has been little or no reference by governments to the arguments canvassed above in support of a more centralised system of environmental governance. There is an entrenched and seemingly unchallengeable assumption that efficiency through avoided duplication inevitably means desistance by the Commonwealth in favor of the states.

The Panel is of the view that it is time to challenge these arguments. There is an important distinction to be made in this regard between regulation and policy-making. In the former context, the choice is between federal regulation on the one hand, and state, regional or local regulation on the other; whereas in the latter context the choice is between intergovernmental forums such as COAG and the NEPC or a Commonwealth authority. In terms of efficiency, the Panel believe that the de-centralised approach based on achieving consensus wholly or substantially within Ministerial Councils and/or COAG before environmental strategies or policy can be adopted nationally may be considerably less efficient than working through a Commonwealth authority. Whilst this would also involve significant consultation and negotiation, the capacity of one or two jurisdictions to delay or dilute particular outcomes would be avoided. The Panel is therefore of the view that the efficiency argument holds little weight in terms of environmental policy formulation processes in Australia.

In appraising the various arguments canvassed above for centralised and de-centralised approaches respectively, the Panel is of the view that those supporting a centralised approach have greater weight and relevance in relation to the Australian system of environmental federalism, particularly in terms of strategy and policy.⁷⁴ The arguments based on legitimacy, innovation and efficiency do not appear to have a particularly strong justification or applicability in this country. This may well be a reflection of a broader proposition that such arguments are less applicable when dealing with a 'collective action' problem such as environmental harm. This appears to be the view of a significant majority of the expert commentators in this field, and the Panel is satisfied that it applies equally in the Australian context as it does elsewhere.

APEEL are reinforced in this conclusion by the findings of a unique comparative survey of environmental federalism by Weibust in three countries (Switzerland, Canada and the USA) and the EU, which concluded that centralisation of

⁷² For a typical example of industry advocacy based on these arguments, see the joint submission of the Australian Petroleum Production and Exploration Association, the Business Council of Australia and the Minerals Council of Australia, Submission No 24 to the House of Representatives, *Inquiry into streamlining environmental regulation, 'green tape' and one-stop-shops*, April 2014, available at <http://www.minerals.org.au/news/inquiry_into_streamlining_environmental_regulation_green_tape>, which states (at 3): 'Broadly, there are four sources of cost, delay and uncertainty in environmental regulation. These are where processes are (1) inefficient, (2) unnecessarily duplicative between and within governments, (3) due to their open-ended nature or by being poorly defined, introduce uncertainty into project delivery and (4) accompanied by unduly complex and prescriptive, often open-ended, conditions'.

⁷³ Senate Environment and Communications Legislation Committee, Parliament of Australia, *Environment Protection and Biodiversity Conservation Amendment (Retaining Federal Approval Powers) Bill 2012* (2013), 26 available at <http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Environment_and_Communications/Completed_inquiries/2010-13/epbcfederalpowers/report/index>.

⁷⁴ For the same conclusion offered over twenty years ago, see P Toyne, *The Reluctant Nation: Environment, Law and Politics* (ABC Books, 1994). The late Phillip Toyne served a distinguished career both within the non-government sector and subsequently as a senior Federal government officer, where he was involved in the early stages of drafting of the *EPBC Act*.

environmental policy development invariably leads to more effective outcomes:

‘Environmental regulation presents a collective action problem, one best resolved by a centralized response. When environmental governance in these federations was most decentralized, lower levels of government proved unable to prevent serious environmental problems from growing worse. Strenuous efforts at cooperative solutions to transboundary pollution problems were similarly ineffective’.⁷⁵

Even for those who seek to advance the subsidiarity principle in support of the current environmental federalism system in Australia, a proper application of this principle (in the form that it has been defined in the EU rather than the distorted version widely adopted in Australia) allows for the possibility of federal leadership in relation to strategy and policy where this would be ‘better achieved’ at the federal level. This raises specifically the additional argument regarding ‘effectiveness’ that has been widely invoked alongside efficiency in Australia - that is, that the current de-centralised system is more effective than a more centralised one would likely be. A simplistic assumption to this effect has been made repeatedly by Commonwealth and state governments (and frequently also industry representatives) when asserting the ‘effectiveness’ justification for various arrangements of a de-centralised nature, without any real effort to assess its validity.⁷⁶ The question is inevitably hypothetical in nature, but it can be addressed in part by examining the performance of the current Australian system from an effectiveness perspective.

2.2.2.3 The effectiveness of the current, de-centralised system of environmental governance

The *Background Paper*, provides a detailed critique of the current system which is summarised in this paper beginning with a consideration of COAG and the Ministerial Council system, whose operations have been criticised by some legal commentators for involving a so-called ‘democracy deficit’. In particular, it has been suggested that the process involved for the development of many outputs from these bodies has been managed exclusively by senior government officials and has not allowed for regular involvement in outcomes by parliaments (both state and/or Commonwealth) or key stakeholders (including both industry and the community).⁷⁷ These criticisms have strong relevance in the context of environmental federalism, since two key intergovernmental agreements (the *IGAE* in 1992 and the *HOA* in 1997) were developed by COAG without any form of public consultation and have not been subjected to any discussion or scrutiny within either the Commonwealth or state parliaments. The result has been a substantial reframing of the constitutional capacity of the Commonwealth on environmental matters through political accords reached behind closed doors and without any form of external scrutiny.

Even were the COAG system to be more open and democratic in character, APEEL thinks there is cause still to question the adequacy and timeliness of the strategies and other outputs that are generated by this system. The need to arrive at a consensus amongst all jurisdictions with respect to these instruments often causes long delays in their adoption and can lead to modified outcomes (sometimes described as ‘lowest common denominator’ results). Bates notes that, in addition to being slow to be developed and representing a lowest common denominator approach, national policies and strategies are ‘too much affected by political considerations’ and are also ‘strong on motherhood statements of concern but come up short on positive action’.⁷⁸ The end result is a lack of vigorous strategic direction nationally in relation to critical aspects of environmental management. A similar criticism has been levelled recently by Debus.⁷⁹

Also, the implementation of such instruments is entirely a voluntary prerogative of state and Commonwealth governments and can lead to widely varying levels and methods of delivery across jurisdictions. To take just one

⁷⁵ Weibust, above n 67, 191.

⁷⁶ The absence of any comparative assessment of this nature is not peculiar to the Australian situation. Weibust, above n 67, 21, notes that: ‘There has been no systematic study comparing the effectiveness of federal vs. state and local provision of environmental regulation. One reason is that very little comparative data is available on the performance of state and local governments in this area, with the exception of programs that have been delegated by the US federal government’.

⁷⁷ C Saunders, ‘The Constitutional, Legal and Institutional Foundations of Australian Federalism’, in R Carling, (ed), *Where To For Australian Federalism?* (Centre for Independent Studies, 2008) 1; P Kildea, ‘Making Room for Democracy in Intergovernmental Relations’, in P Kildea, A Lynch and G Williams (eds) *Tomorrow’s Federation: Reforming Australian Government* (The Federation Press, 2012) 73.

⁷⁸ Bates, above n 6, 166.

⁷⁹ R Debus, ‘All living things are diminished: Breaking the national consensus on the environment’ (Perspectives Series, Whitlam Institute, University of Western Sydney, November 2014) 12: ‘Although the national conservation programs of the last 40 years have been vital to the protection of the environment, they have certainly not been wholly successful. In some areas, threats to ecosystems such as invasive species have worsened; new threats emerge; wildlife continues to decline and some habitats continue to fragment. If the losses are to be decisively stemmed and the landscape permanently restored, the effort will have to be more effective – it will require sustained, mainstream funding and some better methods’ (available at <<http://apo.org.au/node/42305>>).

example of what might be termed an ‘implementation deficit’ involving a significant national strategy - the *National Biodiversity Strategy 2010-2050*⁸⁰ - a recent review of this *Strategy* concluded that it has failed to ‘effectively influence biodiversity conservation activities’.⁸¹ The review noted that ‘there was no ongoing oversight from jurisdictions to facilitate and coordinate implementation of the *Strategy*’ and also that ‘an implementation plan, including allocation of responsibility for actions, has not been established and coordinated implementation of the *Strategy* has been ineffective’.⁸² These are very significant deficiencies that are not confined to this particular *Strategy* and which are attributable to the de-centralised nature of the system for both development and implementation of such strategies.⁸³

Another important consideration concerning the effectiveness of the current system is that the substantial restructure of the Ministerial Council system by COAG in early 2014 means there is no longer a fully-functional Ministerial Council for environmental matters generally, leaving only the NEPC to perform its relatively narrow role with respect to the production of NEPMs (which is discussed further below). This development reflects a down-grading of environmental concerns within the COAG system and leaves even less scope for the development of national environmental strategies, as has occurred regularly in the past.

With respect specifically to the NEPC, APEEL considers that many of the deficiencies associated with national strategies can be attributed also to this model. It has proven to be an extremely slow-moving vehicle for the production of national standards and for their up-dating from time to time. Despite its three-quarters majority voting rule, in practice it has essentially produced lowest-common-denominator outcomes. In addition, NEPMs do not automatically take effect within state jurisdictions and therefore require further, specific action in each jurisdiction to ensure their operation. In short, it has not served to deliver either efficient or effective outcomes, thereby failing the test noted above that is commonly applied by governments in Australia to justify arrangements of this nature. These criticisms are supported by a recent review of air pollution law and policy in Australia by Environmental Justice Australia, which concluded as follows:

‘The two critical elements that are currently lacking in our regulatory system are strong Commonwealth leadership on standard setting to break the current regulatory logjam, and mechanisms to ensure [that] implementation of the national standards occurs at state, regional and pollution-source levels’.⁸⁴

In addition, the uniform NEPC legislation allows only a limited range of matters to be addressed through a NEPM, with a focus wholly on environmental quality matters and no provision in relation to biodiversity, heritage, climate change or natural resources-related issues. These additional matters are all left to be addressed through national strategies of an informal character, which as suggested above have serious deficiencies associated with them.

Finally, this paper suggests that one clear measure of effectiveness of the system of environmental governance adopted in Australia is the condition of the Australian environment, a matter which is addressed through the preparation of national *State of the Environment Reports (SOE Reports)* every five years by an independent committee. Since 1996, there have been five national *SOE Reports* produced, the most recent being released in March 2017.⁸⁵ This latest *SOE Report* notes that the main pressures facing the Australian environment are the same as in 2011 when it

80 Department of the Environment and Energy (Cth), *Australia’s Biodiversity Strategy 2010-2030*, Australian Government: Department of the Environment and Energy, available at <<https://www.environment.gov.au/biodiversity/conservation/strategy>>.

81 Department of the Environment and Energy (Cth), *Report on the Review of the first five Years of Australia’s Biodiversity Conservation Strategy 2010-2030, Executive Summary*, Australian Government, Department of the Environment and Energy, available at <<https://www.environment.gov.au/biodiversity/publications/australias-biodiversity-conservation-strategy-five-year-review>>.

82 Ibid.

83 In the case of the implementation of national strategies by the Commonwealth, there is also a glaring limitation arising from the absence of a proper environmental regulation regime beyond its environmental assessment and approval system to manage activities undertaken by Commonwealth bodies or on Commonwealth land (for example, where site contamination issues are involved). This paper will address this issue further below.

84 Environmental Justice Australia, ‘Why Australia urgently needs effective national air pollution laws’ (Research Report, Environmental Justice Australia, 20 May 2014) 22, available at <<https://envirojustice.org.au/major-reports/clearing-the-air-why-australia-urgently-needs-effective-national-air-pollution-laws>>. The Panel agrees with this assessment and notes that similar criticisms may be levelled in other standards-related contexts not covered by the NEPC, for example with respect to ambient water quality. The *Australian and New Zealand Guidelines for Fresh and Marine Water Quality 2000* were undergoing a review by a Joint Steering Committee of the COAG Standing Committee on Environment and water (SCEW). This review last reported on progress in December 2013. With the abolition of SCEW by COAG in 2014, and only informal meetings of Commonwealth and State Ministers taking place occasionally now, there appears to be little prospect that this review will be completed and the Guidelines revised any time within the near future.

85 See Department of the Environment and Energy (Cth), *Australia State of the Environment (SoE) 2016 Overview*, available at <<http://www.environment.gov.au/science/soe>>.

previously reported.⁸⁶ The 2011 *SOE Report* identified some serious concerns with respect to the condition and trends of the Australian environment, including the following:

- Australia's unique biodiversity is in decline and new approaches will be needed to prevent accelerating decline in many species;
- Australia is particularly vulnerable to climate change and its effects are already being seen;
- the impacts of urban air quality on health is still a matter of serious concern;
- Australia's land environment is threatened by widespread pressures, including invasive species, inappropriate fire patterns, grazing and land clearing;
- there are threats to Australian soils in the form of acidification, erosion and loss of carbon; and
- ocean acidification will have a major impact on marine ecosystems.⁸⁷

It is of particular significance to the Panel's examination of the adequacy of the current system of environmental governance that the 2011 *SOE Report* attributes these problems at least in part to the 'fragmented' nature of the environmental governance system. Likewise, the 2017 *SOE Report* suggests that the key challenges to the effective management of the Australian environment include a need for national leadership, a more strategic focus on planning for a sustainable future and specific action programs and policy.⁸⁸ APEEL strongly endorse these views and will present in the next section of this paper ideas as to how these needs can be met.

2.2.2.4 Conclusion

Taking all of the above considerations into account, APEEL concludes that the case for the re-design of the current environmental federalism system in Australia is overwhelming. The Panel does not, however, envisage this re-design to be of such a radical nature as to involve a substantial transfer to the Commonwealth of regulatory functions that have been established for many years at the state, regional and local levels. Rather, **APEEL proposes that responsibility for strategic leadership should be assumed at the central level by the Commonwealth, whilst the implementation of national strategies developed by the Commonwealth should remain primarily with the states, and where appropriate, regional and local governments.**⁸⁹ This paper sets out below ideas with respect to how the Commonwealth could act at first instance in the political domain to pursue this fundamental reform of the current system. In the following section, on the practical dimension of environmental federalism, this paper outlines the legal mechanisms that the Commonwealth could employ for this purpose

2.2.3 Proposals for reform: a new strategic role for the Commonwealth

In considering political options for reform of the current system of environmental federalism in Australia, this paper returns to the core question identified at the outset – *Who should determine the appropriate form of environmental federalism in Australia?* Until now, the clear answer to this core question has been the Commonwealth and the states collectively, working through COAG and Ministerial Councils to establish a consensus-based, cooperative system that has been consolidated through the *IGAE*. This core question involves a consideration of whether, in contributing to the next generation of environmental laws in Australia, the Commonwealth should make a political break from the current system by defining and developing a new strategic leadership role for itself on environmental matters.

⁸⁶ Ibid, Executive Summary.

⁸⁷ See Department of the Environment and Energy (Cth), *State of the Environment Report, 2011 – Summary, including Headlines*, available at <<https://soe.environment.gov.au/download/reports#key-findings>>.

⁸⁸ Department of the Environment and Energy, *SOE 2016 Overview*, Executive Summary, above n 85.

⁸⁹ One qualification to this broad conclusion with respect to the system of environmental assessment and approval established by the Commonwealth in 1975 and substantially reformed through the *EPBC Act* in 1999, is that the Commonwealth has a responsibility to ensure that matters of national environmental significance are fully addressed and protected and that it therefore should continue to be directly involved in this area of environmental regulation. This paper outlines the reasons for this particular conclusion, and the proposals for reform of the *EPBC Act* EEA process, in further detail below.

The Panel notes that as long ago as 1974, there was an authoritative recognition that the Commonwealth should assume a strong degree of responsibility for the environment. In the *Report of the National Estate* (referred to as the 'Hope Report', after the Chair of the Inquiry into the National Estate, Justice Robert Hope), the following statement was made:

'The conception of the functions of a central government of a country is not something static. Rather, it is something which grows from decade to decade....We hold firmly to the view that the protection of Australia's national heritage is a proper function of the Australian national government'.⁹⁰

In a recent article, Woinarski and Blakers have noted the failure of governments in Australia to accept and give effect to this insightful statement:

'The reality is that, 40 years after the National Estate inquiry, responsibility for nature remains unsettled. The states have not ceded it, and the Australian government has not accepted it. Caught between, our care for nature is hostage to changing political fortunes, lacks clear goals and is starved of resources. No-one is accountable... Nature is our shared heritage and...the Australian government is responsible and should be held accountable for its fate'.⁹¹

The Panel wishes to challenge the long-standing assumption in political circles, and which has been regularly endorsed by industry, that the determination of the form of environmental federalism in Australia must continue to be addressed by the states and the Commonwealth through a collective consensus on roles and responsibilities, in particular through an intergovernmental agreement such as the *IGAE*. Instead, the Panel are of the view that this is a matter which the Commonwealth could, and should, assume responsibility for addressing by itself. This exercise should involve a process that includes extensive consultation with the states, regional and local governments and other key stakeholders, but which ultimately leads to a final determination by the Commonwealth for itself of the nature and extent of the role and responsibilities it wishes to assume with respect to the environment.

APEEL's conclusion in this regard inevitably will involve the abandonment by the Commonwealth of the existing inter-governmental 'jurisdictional' agreements in the form of the *IGAE* and *HOA*. There is nothing from a legal perspective that precludes this option being pursued by the Commonwealth, as these agreements are entirely political in nature and have no binding legal effect. Even from a political perspective, however, the Panel does not see such a step as highly controversial, given that the *IGAE* is now almost a quarter-century old.

There is, of course, an alternative approach to addressing the deficiencies of the current system that would involve attempting to renegotiate the *IGAE* and *HOA* in order to recognise an enhanced leadership role for the Commonwealth. The Panel is extremely doubtful that this would lead to a successful redesign of the current environmental federalism model and suspect that such an exercise inevitably would result in a continuation of the current, decentralised approach in order for a consensus to be reached. The Panel does not assume that the states would be totally opposed to such a system redesign, particularly if they could see benefits for themselves from this exercise, but it is doubtful that they would be likely to be supportive proponents of it in the first instance.

RECOMMENDATION 2.1

The Commonwealth should define the nature and extent of its own role and responsibilities in relation to environmental matters; in doing so, it should:

- (i) acknowledge its responsibility for providing national strategic leadership on the environment; and*
 - (ii) recognise that the states will continue to be involved in environmental regulation under state environmental laws and regulatory processes.*
-

⁹⁰ Committee of Inquiry into the National Estate, Parliament of Australia, *Report of the National Estate: Report of the Committee of Inquiry into the National Estate* (1974) 213.

⁹¹ J Woinarski and M Blakers, 'Australian Life' (2015) *Green Agenda*, available at <<http://greenagenda.org.au/2015/07/australian-life/#more-757>>.

Further to Recommendation 2.1, the Panel believe that the first step to be taken by the Commonwealth should be to develop a **Statement of Commonwealth Environmental Interests (SCEI)** that sets out in detail the role and responsibilities it is willing to perform with respect to environmental matters and the types of environmental matters in which it considers it has an interest. The SCEI would then be reflected in the design of the next generation of Commonwealth environmental laws. For practical and political purposes, the SCEI would replace the limited definition of the Commonwealth's role and responsibilities provided in the *IGAE*, thereby effectively terminating that agreement. It would also provide a revised statement of the various environment matters in which the Commonwealth has an interest that is provided in the *HOA*.

The Panel envisage that the SCEI would have two components addressing respectively Commonwealth environmental functions and relevant environmental matters in which the Commonwealth has an interest, together with a third component related to the Commonwealth's role in international affairs concerning the environment.⁹²

RECOMMENDATION 2.2

*The Commonwealth should develop a **Statement of Commonwealth Environmental Interests (SCEI)** comprised of three broad components:*

- (i) a statement of the **functions related to the environment** that it will perform in the future, including:

the provision of strategic leadership on environmental matters;

specific aspects of environmental regulation, including environmental assessment and approval;
and

the environmental regulation of activities undertaken by Commonwealth entities (whether on or outside Commonwealth land) and by other parties on Commonwealth land;*
 - (ii) a statement of the **environmental matters** in which the Commonwealth has an interest, comprised of two elements:

first, a revised list of matters of national environmental significance (MNES) that will serve as triggers for the Commonwealth's environmental assessment and approval process; and

second, a revised list of additional matters besides the listed MNES with respect to which the Commonwealth could pursue a strategic leadership role; and*
 - (iii) a declaration that Commonwealth leadership on environmental matters extends to the adoption of responsible and progressive negotiating positions in international negotiations on various environmental matters.*
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2.3 The practical dimension

Having examined the constitutional and political dimensions of environmental federalism and recommended a re-design of the current system to provide a stronger strategic leadership role for the Commonwealth on environmental matters, this paper must address finally the practical dimension of this subject beginning with a description of the legal mechanisms that have been employed to date by the Commonwealth to implement the various intergovernmental agreements, national strategies and programs as described above and an assessment of the extent to which these

⁹² In the *Background Paper*, the Panel sets out in more detail the subject-matter of these three components.

should remain in place. This paper then outlines ideas concerning the legal mechanisms that could be employed by the Commonwealth to pursue a stronger strategic leadership role and to secure the engagement of the states in the implementation of its strategic measures. Finally, this paper considers the future regulatory role of the Commonwealth, including with respect to the vexed subject of environmental assessment and approvals.

2.3.1 Description of the current system

Commonwealth environmental law dates back to the mid-1970's and clearly reflects the influence of the political approaches to environmental federalism described in the previous section of this paper. The substantial body of Commonwealth environment-related legislation that is currently in operation, as set out in Appendix 1 of this paper, reveals an overwhelming preference for complementary and interlocking arrangements with state legislation on the same subject-matter rather than for pre-emptive approaches. In a number of instances, Commonwealth legislation forms part of a nationally-agreed scheme emanating either from COAG or a relevant Ministerial Council that is given effect through either uniform or 'nationally consistent' legislation. In other instances, the Commonwealth has simply drafted its legislation with considerable care to limit its operation so as to avoid duplication of, or overlap, with state measures. This paper will set out a brief overview of the various types of mechanisms that have been employed in pursuit of this Australian version of 'cooperative' environmental federalism.

2.3.1.1 Uniform legislative schemes

Uniform legislative schemes have been adopted in relation to a number of aspects of environmental regulation, including with respect to marine pollution (largely implementing international treaty measures), historic shipwrecks and the adoption of NEPMs.⁹³ In the case of the NEPM scheme, as noted above, the states are responsible for adoption and implementation of these measures within their respective jurisdictions under their own environment protection legislation.⁹⁴ Each state has established an Environment Protection Authority for the purpose of regulating pollution and managing wastes within their respective jurisdictions and hence the Commonwealth plays only a peripheral role in the area of environmental protection, principally through its involvement in the NEPC.⁹⁵

2.3.1.2 'Nationally consistent' legislative schemes

The concept of 'nationally consistent' legislation underpins a range of other Commonwealth Acts that are directed at the assessment of the environmental and health risks associated with certain products or processes - in particular, agricultural and veterinary chemicals, industrial chemicals, therapeutic goods, food additives, gene technology and biological control of weeds. In each instance, the relevant legislation seeks to implement a national scheme that has been adopted by way of an inter-governmental agreement adopted by the Commonwealth and the states. It usually establishes a Commonwealth authority to manage the relevant risk assessment process and the consequential issue of licences or permits (for example, for import, manufacture and sale), whilst leaving other regulatory functions to be covered through state legislation (for example, re use, storage, transport and disposal).

The concept of 'national consistency' varies across these several Acts, but has often been accomplished by the use of an 'applied law' mechanism whereby one jurisdiction adopts a law on a particular subject which is then applied by the other jurisdictions. In two instances (agricultural chemicals and therapeutic goods), relevant Commonwealth measures have been adopted as state law,⁹⁶ whilst other schemes allow for particular regulatory functions to be performed at

⁹³ For the relevant Commonwealth legislation, see Appendix 1 hereto.

⁹⁴ See *National Environment Protection Measures (Implementation) Act 1998* (Cth).

⁹⁵ See further Bates, above n 6, 597–702 for a description of relevant State measures. This paper has recommended above (see Recommendation 2.2) that the Commonwealth should develop its own environmental protection measures to regulate activities undertaken by Commonwealth entities and by any parties on Commonwealth land.

⁹⁶ The AGVET Code presented in a Schedule to the *Agricultural and Veterinary Chemicals Act 1994* (Cth) is deemed to be a law of any Territory (s 7) and may be adopted as the law of any state (s 11(2)) and likewise with respect to Regulations made under this Act (ss 9 and 11(3)); in relation to therapeutic substances, corresponding state legislation has applied the Commonwealth's *Therapeutic Goods Act 1989* (Cth) as a law of the state: see for example, *Poisons and Therapeutic Goods Act 1966* (NSW), s 31; and *Controlled Substances Act 1984* (SA), s 11A.

the state level rather than by the Commonwealth - for example, in relation to the storage, transport, handling and disposal of industrial chemicals. A number of these Acts also include a 'conferral clause' whereby functions, powers and duties arising under 'corresponding state laws' may be conferred on Commonwealth authorities.⁹⁷ In some instances, provision also has been made for administrative appeals or judicial review proceedings arising from the implementation of corresponding state laws by a Commonwealth authority to be handled by the Commonwealth Administrative Appeals Tribunal⁹⁸ or Commonwealth courts⁹⁹.

2.3.1.3 Complementary Commonwealth legislation

Looking beyond Commonwealth legislation that forms part of a uniform or nationally consistent scheme, a collaborative approach has been achieved by limiting the scope of Commonwealth environmental legislation so as to avoid duplication with state measures related to the same subject-matter. In most instances, such approaches are the result of prior understandings reached by the Commonwealth and the states via intergovernmental agreements. This approach is reflected, for example, in Commonwealth legislation concerning various types of national environmental standards (motor vehicles, fuel quality, radiation protection and nuclear safety, water efficiency labelling and energy efficiency). It is also evident in arrangements with respect to greenhouse and energy reporting and product stewardship.¹⁰⁰ Under these various legislative schemes, any relevant state legislation will normally operate alongside, and unimpeded by, the relevant Commonwealth legislation.

There are two particular means by which Commonwealth environmental legislation frequently has been restricted in its scope so as to not overlap or over-ride state legislation on the same subject-matter.

First, the Commonwealth has often limited the operation of its legislation to 'places' over which it has exclusive legislative jurisdiction by virtue of section 52 of the *Constitution*. In the case of offshore waters, it has reflected the terms of the *Offshore Constitutional Settlement (OCS)* adopted in 1978,¹⁰¹ by applying its legislation with respect to marine pollution, fisheries, minerals and petroleum only in the 'Commonwealth' waters extending beyond the coastal section that is subject to state jurisdiction under the *OCS*.¹⁰² It also should be noted that various aspects of the biodiversity conservation component of the *EPBC Act* (for example, regarding the protection of listed endangered species and ecological communities and the establishment and management of protected areas) only apply to areas under Commonwealth jurisdiction.¹⁰³

Second, the operation of certain Commonwealth environmental legislation has been confined to functions that rest with the Commonwealth rather than the states, such as the regulation of exports and imports. This is evident in legislation governing hazardous wastes, endangered species, illegal logging, moveable cultural heritage and certain industrial chemicals, much of which is designed to implement international agreements regulating global trade in the relevant items.¹⁰⁴

97 *Therapeutic Goods Act 1989* (Cth), ss 6AAA, 6AAAE (and see also ss 6AAB–6AAC in relation to the constitutional basis for conferral); *Agricultural and Veterinary Chemicals Act 1994* (Cth), ss17–18; *Gene Technology Act 2000* (Cth), s 17; a more limited form of conferral in relation to notifications is provided for in s 41 of the *Industrial Chemicals (Notification and Assessment) Act 1989* (Cth).

98 *Therapeutic Goods Act 1989* (Cth), s 6B; *Agricultural and Veterinary Chemicals Act 1994* (Cth), s 18.

99 *Therapeutic Goods Act 1989* (Cth), s 6AAAD.

100 Whilst the *Products Stewardship Act 2011* (Cth) contains a pre-emptive provision relating to mandatory product stewardship schemes (s 39), its only application to date (in relation to televisions and computers) was the result of a prior consensus reached between Commonwealth and State Ministers rather than unilateral Commonwealth action.

101 See *Coastal Waters (State Powers) Act 1980* (Cth) and *Coastal Waters (State Title) Act 1980* (Cth), which form part of a uniform legislative scheme; for further details see <<https://www.ag.gov.au/Internationalrelations/InternationalLaw/Pages/TheOffshoreConstitutionalSettlement.aspx>>.

102 In the case of some Commonwealth fisheries zones located in the northern offshore waters, and in the case of all petroleum-related activities, it has gone further in terms of collaborative arrangements by establishing Joint Authorities comprised of the respective State and Commonwealth Ministers to administer the relevant Commonwealth legislation.

103 For example, the Act provides for the preparation by the Commonwealth of recovery plans for threatened species and ecological communities listed under the Act, and also for threat abatement plans to be prepared in relation to listed threatening processes. However, it only proscribes actions by a Commonwealth agency in contravention of such plans (s 268) and imposes a duty to implement such plans only 'to the extent that they apply in Commonwealth areas' (s 269(1)). Where a recovery plan or threat abatement plan applies outside a Commonwealth area in a particular state, as is very common, the Commonwealth 'must seek the cooperation of the State' with respect to implementation of the plan (s 269 (2)).

104 See relevant legislation at Appendix 1 to this report.

2.3.1.4 Commonwealth environmental legislation that applies directly within the states

After taking the above arrangements into account, there remain only a small number of instances in which Commonwealth legislation is capable of operating directly within the states in a manner that pre-empts or duplicates arrangements under state laws on the same subject-matter. In a few instances, the Commonwealth has considered it appropriate to legislate so as to cover the field with respect to a particular environmental matter, usually for the purpose of implementing relevant treaty obligations - for example, with respect to nuclear-related matters addressed in international agreements. The states have also agreed to have the Commonwealth deal comprehensively with the regulation of ozone depleting substances, in pursuance of international treaty obligations under the *Vienna Convention* and the *Montreal Protocol*.

In other instances, Commonwealth legislation may appear to operate directly within a state without necessarily over-riding state laws on the same subject-matter, but in each instance closer examination reveals that there is an underlying political accord between the Commonwealth and the states to allow for Commonwealth regulation and that the Commonwealth has not sought to act unilaterally or coercively in these particular situations.¹⁰⁵

This paper has not addressed in this overview the *EPBC Act*, which has the capacity to apply to activities being undertaken within, and subject to, equivalent state environmental laws, and which has been criticised for allegedly duplicating these state measures. The paper deals with this topic separately in the following section, after detailing the proposals for legal mechanisms to facilitate the strategic leadership role that the Panel recommends the Commonwealth should adopt.

2.3.1.5 Commonwealth financial assistance legislation

Finally, the Panel notes that there are instances over the past 40 years where the Commonwealth has sought to influence environmental management at the state level through legislation for the provision of direct financial assistance to the states, relying on section 96 of the *Constitution* (as discussed above). An early example of this approach which is not widely appreciated, dates back to the mid-1940's, when the Commonwealth provided direct financial assistance to the states for public housing development on the condition that the states adopt 'town planning' measures to ensure the orderly development of Australian cities in the anticipated post-war boom.¹⁰⁶ All states accepted this scheme and thus began the development of modern state planning laws in Australia, at first instance via the amendment of local government legislation, but eventually as stand-alone measures. It is these state planning laws in their contemporary form that still provide a core element of environmental law in Australia today.

The use of section 96 in this manner by the Commonwealth to drive the development of appropriate environmental planning laws at the state level is a matter to which this paper later returns when it recommends the use of Commonwealth financial assistance as one means of securing state cooperation in the implementation of Commonwealth-developed national strategic measures.

2.3.2 Analysis

APEEL does not see the need to propose wholesale changes to the legislative schemes just described, which for the most part reflect the desirable goal of promoting coordinated approaches to Commonwealth and state environmental regulation. In particular, as indicated above, the Panel does not advocate that the Commonwealth should take over from the states (and regional and local authorities established within the states) the wide range of environmental

¹⁰⁵ For example, the Commonwealth's *Water Act 2005* (Cth), which appears to reflect a more centralist and coercive approach, is based on the terms of the Murray-Darling Basin Agreement made between all the Basin State jurisdictions and the Commonwealth (and which is included in the first Schedule to the Act). In addition, the constitutionality of this Act was underpinned by the use of s 51(xxxvii) of the *Constitution* to enable a referral of state powers to the Commonwealth. The Commonwealth drove a hard bargain in terms of securing stronger powers for the Murray-Darling Basin Authority in return for the allocation of substantial Commonwealth funds for the buy-back of water from irrigators for environmental flows and for infrastructure works designed to increase water efficiency. Nevertheless, the legislation is ultimately the product of a political agreement between all the governments involved.

¹⁰⁶ See *Commonwealth and State Housing Agreement Act 1945*, cl 3.1: 'Each State shall ensure that adequate legislation exists in the State to enable it at all times to control throughout the State - (a) rental housing projects under this Agreement; (b) slum clearance; and (c) town planning'.

regulatory functions that they currently perform. Instead, the principal pathway that is urged for the re-design of the existing environmental federalism system is for the Commonwealth to assume responsibility for developing the strategic parameters of the system, rather than relying on the current consensus-based approach that involves all jurisdictions. In the following section on options for reform, this paper outlines in more detail the specific means, in the form of legal mechanisms, by which the Commonwealth could follow this new pathway.

Alongside this new approach, the Panel envisage a continued reliance on the existing legislative mechanisms as described above, which together form different elements of the federalism spectrum referred to in the previous section of this paper (see also Recommendation 2.10 below). The Panel also strongly support an ongoing direct role for the Commonwealth in environmental assessment and approvals and will address these matters in more detail below, when this paper considers the future regulatory role of the Commonwealth.

2.3.3 Proposals for reform: Key elements of a new Commonwealth strategic role

This paper sets out below the specific legal mechanisms which the Panel believe the Commonwealth could employ to pursue a national strategic leadership role on environmental matters. In particular, the paper describes the types of strategic environmental instruments that the Commonwealth should develop; the process by which these instruments would be adopted; and the means by which the Commonwealth can act to ensure their implementation by the states. The paper will also address the question of how to ensure that the Commonwealth acts proactively to develop strategic environmental instruments and pursue their implementation, given that particular governments may adopt differing attitudes to this responsibility from time to time.

2.3.3.1 Commonwealth Strategic Environmental Instruments (CSEIs)

APEEL proposes that Commonwealth strategic leadership on environmental matters should be pursued through the development by a relevant Commonwealth authority (see further below as to the nature of this authority) of both national and regional strategic environmental instruments, with different types of instruments being involved in these respective contexts. These are summarised in the following table:

Commonwealth Strategic Environmental Instruments (CSEIs)

NATIONAL ENVIRONMENTAL MEASURES (NEMs)	REGIONAL ENVIRONMENTAL PLANS (REPs)
Strategies	Terrestrial Landscape-Scale Plans
Programs	Marine Regional Plans
Standards	
Protocols	

2.3.3.1.1 National Environmental Measures (NEMs)

Looking first at NEMs, the Panel proposes an adaptation of the range of instruments currently provided for by section 14(3) of the *National Environment Protection Council Act 1994 (NEPC Act)* that are able to constitute a NEPM - namely a standard, goal, guideline and protocol. This paper suggests the addition of **strategies** and **programs** in place of goals and the exclusion of guidelines, which are documents essentially of an informal and advisory nature that should not be treated in the same fashion as the other three categories. The Panel believe that the NEPC uniform legislative scheme

should be abolished¹⁰⁷ and that the Commonwealth should adopt legislation under which it assumes responsibility for the development of NEMs in relation to the broad range of matters outlined in the proposed SCEI. The Panel see no particular constitutional impediment in this regard.

National environmental strategies would comprise statements that set out overarching goals and objectives with respect to particular environmental matters. This is not a new concept and there have been many examples in the past, such as the *National Biodiversity Strategy*, the *National Climate Change Strategy*, and the *NSESD*. The difference however is that the Panel proposes that the Commonwealth should assume responsibility for the design and formal adoption of national environmental strategies in the future, rather than having such instruments adopted through COAG or a Ministerial Council. The Commonwealth should consult extensively with the states and key stakeholders in the course of their development, but it would assume ultimate responsibility for their adoption. This approach stands in distinct contrast with the current approach in which the approval of all jurisdictions is generally required for the adoption of national environmental strategies.

To help explain the proposals in this regard, Australian Panel of Experts on Environmental Law, *The Foundations for Environmental Law: Goals, Objects, Principles and Norms* (Technical Paper 1, 2017) recommends that a new national strategy on sustainable development/sustainability should be developed by the Commonwealth. APEEL sees this as one of the highest priorities for the Commonwealth in terms of pursuing its suggested leadership role on environmental matters. In developing such a strategy, the Commonwealth could reconsider the core definition and related principles concerning ESD, with the aim of having these reflected in the next generation of environmental laws. It also could develop a set of targets that are designed to enable the achievement of the United Nation's *Sustainable Development Goals (SDGs)* and *Global Agenda 2030* in Australia. This would constitute a much more detailed and fine-grained form of strategy statement that would involve the development of goals and targets across a wide range of topics.¹⁰⁸

Turning to the idea of **national environmental programs**, the Panel suggests that these would be instruments developed by the Commonwealth that outline actions needing to be undertaken across all levels of government in order to achieve specific environmental outcomes. They would differ from national environmental strategies by being focused essentially on practical action rather than aspirational goals. As with strategies, the Panel see no significant limitation on the types of environmental matters that might be made the subject of a national environmental program, either in policy or constitutional terms. To a considerable extent, the implementation of national environmental programs would be dependent upon Commonwealth financial assistance, a matter discussed further below.

To illustrate the nature of this particular type of national environmental measure, the paper suggests here several ideas for programs that would contribute to the protection of biological diversity:

First, noting that Australian Panel of Experts on Environmental Law, *Terrestrial Biodiversity Conservation and Natural Resources Management Governance* (Technical Paper 3, 2017) recommends the completion of the National Reserve System (NRS), a Commonwealth program could provide a means of pursuing this recommendation by identifying specific targets for additions to the NRS, possibly based on recommendations arising from the regional plans canvassed below. One part of this program could involve the adoption of consistent criteria and terminology for the classification of different categories of protected area across all jurisdictions.¹⁰⁹

Second, taking a specific aspect of the protected areas system that has attracted attention recently - the idea of a national network of wildlife corridors - the Commonwealth could develop a wildlife corridors program that might prove more effective (and less easily ignored) than the National Wildlife Corridors Plan adopted by the Commonwealth in

¹⁰⁷ If the Commonwealth were to repeal its *NEPC Act*, this would for all practical purposes bring an end to the uniform scheme, even if the corresponding state legislation remained on the statute books.

¹⁰⁸ For an insightful evaluation of how another developed country, Germany, could implement the SDGs and the Global Agenda 2030, see German NGO Forum on Environment and Development, *Position Paper: Implementation of the Global 2030 Agenda for Sustainable Development in Germany*, March 2016, available at <<https://www.globalpolicy.org/component/content/article/271-general/52849-implementation-of-the-global-2030-agenda-for-sustainable-development-in-and-by-germany.html>>.

¹⁰⁹ APEEL recognise that any program related to completion of the NRS would have to link closely to regional environmental plans of the kind that is proposed below, insofar as these plans can be expected to also address this topic.

2012, which has since been abandoned.¹¹⁰

Third, in relation to endangered species protection, a national endangered species program could provide for consistency of approach across all jurisdictions to listings and a coordinated approach to the development of recovery programs - possibly linked also to a national ecological restoration strategy.

Turning to a different context in which a national environmental program might be envisaged, the Panel recognises that one of the greatest challenges to effective environmental management in Australia is the lack of adequate data upon which to base both policy and decisions. The Panel notes in this regard, the recommendation in Technical Paper 3 on the need for Commonwealth leadership with respect to monitoring, evaluation and reporting. The need for better environmental data and monitoring of environmental conditions has also been noted by Woinarski and Blakers, citing several *SOE Reports*.¹¹¹ The Panel believe there is a compelling need for leadership by the Commonwealth in this context through the development of a national environmental programme with respect to environmental data collection, monitoring, evaluation and reporting, to be implemented in collaboration with relevant state, regional and local bodies.

Finally, with respect to climate mitigation and the promotion of clean energy, many of the policy options canvassed in Australian Panel of Experts on Environmental Law, *Climate Law* (Technical Paper 5, 2017) and *Energy Regulation* (Technical Paper 6, 2017) could be framed within a national climate change and clean energy strategy that establishes specific national emissions and renewable energy targets, which could then be complemented by a national program that identifies the key mechanisms to be developed respectively by the Commonwealth and the states for the achievement of these targets.

Turning next to the idea of **national environmental standards**, the Panel notes that these have been an important component of the various NEPMs that have been developed over the past twenty years by the NEPC (for example, in relation to ambient air quality and diesel vehicle emissions). The Panel see particular advantages in having a Commonwealth environmental authority develop national environmental standards in terms of reducing the time required for their adoption or amendment, and also with respect to ensuring their implementation through the various mechanisms as discussed below. As noted above, it is envisaged that national environmental standards would operate in most instances as a floor rather than a ceiling or, in other words, that they would constitute a mandatory minimum standard, with the states left free to adopt more stringent standards if they so desire. The Panel acknowledges that there may be some limited circumstances where national standards may constitute a ceiling and would over-ride any contrary state standards of a stricter nature.¹¹²

One example offered of a possible new national environmental standard is with respect to the establishment of regulatory controls for carbon emissions from coal-fired power plants. Should a regulatory approach (as distinct from a market or tax-based approach) be considered a desirable means of meeting emissions reduction targets set in a national environmental strategy, the relevant standards for carbon emissions from power plants could be prescribed in a national environmental standard.

Finally, with respect to NEMs, it is envisaged that **national environmental protocols** could be used for various more technical purposes, for example, to develop various types of national environmental and sustainability indicators that would provide a framework for future reporting on the state of the Australian environment and the progress that is being made towards developing a more environmentally and socially sustainable society. Another application of a guideline or protocol could be for the purpose of establishing a common approach across all jurisdictions within Australia to the operation of biodiversity offsets, where currently there is a diversity of approaches evident.

APEEL acknowledges that in some of the circumstances identified above, implementation of a NEM may require the adoption of legislation to set in place appropriate regulatory or other mechanisms. This would most likely be

¹¹⁰ For details, see Department of Sustainability, Environment, Water, Population and Communities, *National Wildlife Corridors Plan*, Australian Government: Department of Sustainability, Environment, water, Population and Communities, <<http://www.environment.gov.au/topics/biodiversity/biodiversity-conservation/wildlife-corridors>>.

¹¹¹ J Woinarski and M Blakers, above n 91, citing in support S Morton, and A Tinney, *Independent review of Australian Government environmental information activity: Final report* (Canberra, Department of Sustainability, Environment, Water, Population and Communities, 2012).

¹¹² In the United States this has occurred only in three contexts: motor vehicle emissions, nuclear health and safety and pesticides packaging and labelling.

at the state level in most instances, but it may also involve the Commonwealth where this is necessary to influence activities of Commonwealth bodies or undertaken on Commonwealth land, or possibly where states have declined to cooperate in the implementation of a particular measure. In the case of the states, the Panel understands that the Commonwealth cannot compel the passage of implementing legislation by the state parliaments and that it is possible that some NEMs could therefore face significant obstacles with respect to their implementation where the necessary legislation has not been adopted at the state level. This paper outlines below two mechanisms (direct financial assistance and conditional pre-emption) that the Panel proposes should be attached to this new system for NEMs and which may have a strong influence in terms of inducing states to cooperate with respect to the implementation of such measures, including by way of any necessary legislative action.

2.3.3.1.2 Regional Environmental Plans (REPs)

APEEL sees (REPs) as a critical element of the new structure of Commonwealth strategic environmental instruments, particularly as they should integrate with, and provide a basic means for the implementation of NEMs, especially national environment strategies and programs. Delivery of nationally-focused strategies, particularly those focused on biodiversity protection and natural resources management, will require their integration with related measures at the regional level.

The Panel envisage two specific forms of strategic instruments at the regional level that should be developed by the Commonwealth, in each instance involving an expanded application of processes that are already provided for in the *EPBC Act*.

First, as proposed in Technical Paper 3 on the management of terrestrial biodiversity, the Panel recommends the pursuit of **terrestrial landscape-scale plans** at appropriate bioregional scales through a nationally coordinated framework. The Commonwealth could lead this process by coordinating the preparation of such plans in consultation with the states and non-government stakeholders. A key element of this approach that is strongly promoted in Technical Paper 3 is the need to coordinate existing, fragmented and sometimes overlapping natural resources planning processes across all levels of government. The development of these plans will also involve sensitive and difficult challenges with respect to the acknowledgment of the various types of aboriginal land tenures that exist across Australia.

As Technical Paper 3 also recognises, a number of subsidiary questions need to be addressed in relation to this broad proposal. One such question which is only briefly addressed in Technical Paper 3 is what would constitute ‘appropriate’ bioregional scales for such plans, in particular, whether the existing *Interim Biogeographic Regionalisation for Australia (IBRA)* system (which recognises 89 bioregions and 419 sub-regions) provides a suitable framework for landscape scale planning.¹¹³ This system is focused presently on the identification of large, geographically distinct areas of land with common characteristics for the purpose of identifying gaps in comprehensiveness in the National Reserves System (NRS), but it could provide the structure for the broader system of bioregional planning advocated in Technical Paper 3.

As recommended in Australian Panel of Experts on Environmental Law, *Marine and Coastal Issues* (Technical Paper 4, 2017), the Panel also see the need for a new, **integrated marine planning framework** based on the development of marine regional plans for specific marine bioregions. In a parallel approach to the use of the IBRA system for the terrestrial environment, this framework could be based upon the *Integrated Marine and Coastal Regionalisation of Australia (IMCRA v4.0)* system, which provides the regional spatial framework for classifying Australia’s marine environment into bioregions.¹¹⁴

With respect to each of the two types of regional environmental plan recommended in this section, the Panel recognises that there is an existing Commonwealth framework in place under the *EPBC Act* that can facilitate their use. What is needed in the next generation of environmental laws is, first, a mandatory requirement for the preparation by the Commonwealth of bio-regional plans (both terrestrial and marine)

¹¹³ For details of the IBRA, see Department of the Environment and Energy (Cth), *Australia’s bioregion framework*, Australian Government: Department of the Environment and Energy <<http://www.environment.gov.au/land/nrs/science/ibra/australias-bioregion-framework>>.

¹¹⁴ For details of the IMCRA, see Department of the Environment and Energy (Cth), *Integrated Marine and Coastal Regionalisation of Australia*, Australian Government: Department of the Environment and Energy <<http://www.environment.gov.au/node/18075>>.

and, second, new mechanisms (in the form of implementation plans) for ensuring that the outcomes of these planning processes are fully implemented by both the Commonwealth and the states (see further below).

RECOMMENDATION 2.3

*The Commonwealth, in pursuance of a national leadership role on environmental matters, should assume responsibility for the development of the following types of **Commonwealth Strategic Environmental Instruments (CSEIs)**:*

- (i) **National Environmental Measures (NEMs)**, comprising strategies, programs, standards and protocols; and
 - (ii) **Regional environmental Plans (REPs)**, comprising terrestrial landscape-scale plans and marine regional plans.
-

2.3.3.1.3 The process for the adoption of CSEIs

At the outset, it will be necessary to determine where responsibility should be placed within the Commonwealth for managing the process of developing and adopting the various types of Commonwealth strategic environmental instruments described above. The Panel anticipates that this responsibility would be vested by the next generation Commonwealth environmental legislation in a new Commonwealth environmental institution and this paper canvasses below some options with respect to the nature of this institution (see Recommendation 2.14(1)).

As noted above, there is also a question as to whether, and in what way, the Commonwealth Environment Minister should be involved in the development and approval of such measures, given that it may be necessary from time to time for the Minister to pursue the adoption of implementing Commonwealth legislation in relation to a particular instrument. If primary responsibility rests with an independent Commonwealth institution for producing such instruments, it will be important to ensure that there is strong support for their implementation within the Commonwealth government more generally, particularly should new Commonwealth legislation be required for the purposes of implementation of particular instruments.

It is reasonable to expect that the Commonwealth institution responsible for the development of strategic environmental instruments would consult closely with the Commonwealth government of the day through the Environment Minister and Department concerning any proposed new instruments. In most instances, this should result in the generation of an appropriate level of commitment within the Commonwealth government to the taking of all action necessary to ensure implementation of such instruments at the Commonwealth level, including by way of securing any necessary legislation. However, this paper envisages two specific mechanisms that might serve to ensure a high degree of cooperation and coordination in this regard.

First, there is the possibility that both national and regional strategic environmental instruments could be declared to be legislative instruments under the *Legislative Instruments Act 2003 (Cth)*, which would mean that they must be tabled in the Commonwealth Parliament and would be subject to the possibility of disallowance by a resolution of either house of the Parliament. This form of legislative review is already provided for under the *NEPC* legislation in relation to NEPMs (s 21) and also with respect to the Murray-Darling *Basin Plan* prepared under the *Water Act 2006 (Cth)*. Such an approach would provide a clear flag to indicate if there may be difficulties associated with securing the future passage through the Commonwealth Parliament of any legislation required to enable the implementation of a particular instrument at the Commonwealth level, and might serve also to indicate the level of acceptance on the part of the states of particular instruments. Should an instrument be disallowed, this would clearly reflect strong resistance from either or both directions and the need for further negotiation of its content.

The second possibility is for a power to be vested in the Commonwealth Environment Minister to ‘over-rule’ any Commonwealth strategic environmental instrument that the relevant Commonwealth institution has decided to approve. The power to do so should be exercisable by the Minister only upon limited grounds, for example, related to the perception of an over-riding ‘public interest’ in not allowing the instrument to come into operation. The Panel are wary of such a procedure insofar as it may enable a Commonwealth government that is antipathetic or even hostile to environmental concerns to undermine the system by over-ruling all new instruments approved by the Commonwealth institution; but recognise that there is a *realpolitik* associated with the development and implementation of such instruments (particularly those that take the form of strategies and programs) which necessitates buy-in by the government of the day through its Environment Minister if this system is to be effective. The trade-off for securing such buy-in, therefore, might be to vest a residual power to disapprove a specific instrument in the Commonwealth Environment Minister, who would then have to publicly justify taking such action on ‘public interest’ grounds. The Panel makes no firm recommendation at this time concerning this particular safeguard mechanism and look forward to canvassing its merits with interested parties.

Turning to the question of the specific process by which strategic environmental instruments would be developed, the Panel suggests that the future generation of Commonwealth environmental legislation should spell out the various steps required to be pursued by the relevant Commonwealth institution, including requirements for giving notice of an intention to develop measures, for consultation with all key stakeholders (including state governments) in the course of their preparation, and for the final approval of measures by the relevant Commonwealth institution.

RECOMMENDATION 2.4

The next generation of Commonwealth environmental legislation should spell out the process for the development of Commonwealth strategic environmental instruments and provide for such instruments to be treated as ‘legislative instruments’ under the Legislative Instruments Act 2003 (Cth).

2.3.3.2 Implementation plans (state and Commonwealth)

Once a strategic environmental instrument has been adopted by the Commonwealth, the question arises as to how best to secure its implementation – both by the states and by relevant Commonwealth agencies. This question will arise at the state level irrespective of whether particular states have participated in the preparatory process. This paper therefore addresses first the question of how to secure state involvement in the implementation of approved Commonwealth strategic environmental instruments and then consider the same question in the Commonwealth context.

APEEL wish to draw upon the experience in the United States with respect to the implementation of federal environmental standards (as outlined in detail in the *Background Paper*) by proposing that the principal mechanism for securing the implementation of Commonwealth strategic environmental measures should be an **implementation plan**. Such plans would need to be developed by the states for each relevant strategic instrument and submitted to the proposed, new Commonwealth environmental institution for its approval. The next generation of Commonwealth environmental legislation would need to include a provision that invites each state to submit a State Implementation Plan (SIP) within a prescribed time after a strategic measure has been adopted (say, six to twelve months).

An important element of this proposed scheme is that in some instances it may be necessary for states to make changes to their existing laws and their supporting administrative arrangements (or even possibly to enact new laws) in order to ensure that they are able to fully and effectively implement particular Commonwealth strategic environmental instruments. For example, the Panel envisage that this approach could be used to pursue implementation at state level of the proposals advanced in Australian Panel of Experts in Environmental Law, *Democracy and the Environment*

(Technical Paper 8, 2017) with respect to the recognition of both substantive and procedural environmental rights.¹¹⁵ Providing stronger incentives for the states to improve and upgrade their environmental laws from time to time is a critical objective of the system this paper is proposing, one which is largely absent from the current environmental federalism system. This approach would allow those elements of environmental governance capacity which are best pursued at the Commonwealth level to be married with other elements that tend to be best undertaken at the state, regional and local levels. There is a need therefore to provide for a specific mechanism whereby such changes could be identified and agreed upon within SIPs.

The mechanism that has been employed for this purpose under the US system is 'delegation', which involves the Environmental Protection Agency in reaching agreement through implementation plans with each state as to the relevant state legislative and administrative measures that will be relied upon by the state concerned for the purpose of implementing federal standards (in the case of clean air) or by the approval of state licensing systems (in the case of clean water). In each instance, federal regulatory controls may be brought into operation so as to pre-empt relevant state measures if a state does not receive the required Federal delegation (see further below regarding how this mechanism might be adapted to the Australian situation). There is also a reservation of capacity for enforcement action to be pursued against non-complying parties under the relevant federal legislation (both by the EPA and citizens), even where state legislation is being used under an EPA delegation to regulate air and water quality.

The Panel envisage that this approach could be adapted in the Australian context to allow for the 'accreditation' of state laws and administrative arrangements by the Commonwealth through a SIP, with this being conditional, where it appears necessary, upon appropriate amendments of particular laws or the adoption of new laws by the relevant state government. Whilst the concept of accreditation has proved particularly contentious in relation to its proposed operation through approval bilateral agreements under the *EPBC Act* (see further below), there are significant differences from these previous and, to date, unsuccessful attempts to apply this concept from the scheme that is recommended here. In particular, the approach this paper proposes does not involve a withdrawal by the Commonwealth from its existing role with respect to environmental assessment and approvals. Instead, to the contrary, a failure by a state to secure accreditation of its relevant legislation and administrative arrangements could lead to its own environmental assessment and approval measures being pre-empted by the Commonwealth legislation (see further below).

APEEL believe that placing responsibility for the conclusion of SIPs with the states in an independent Commonwealth environmental institution would lead to a more rigorous accreditation process than has been evident with respect to the negotiation of bilateral agreements under the *EPBC Act*. The relevant Commonwealth legislation could provide, for example, for publication of, and public consultation concerning, draft SIPs before their conclusion.

There should also be provision in the future legislation that if a state fails or declines to prepare a SIP, the Commonwealth would be empowered to prepare the required plan for that state. In the United States, the threat of this action being taken by the federal government has proven to be a powerful incentive for states to develop their own implementation plans, rather than have it done for them by the federal EPA. This is primarily because the states prefer to tailor the actions identified in the implementation plan to their particular legal and administrative arrangements as far as possible, which is less likely to be the case where the federal government is making these decisions for them.¹¹⁶

APEEL acknowledge that, depending on the nature of the particular strategic environmental instrument, there may be significant limitations with respect to what a Commonwealth-prepared SIP could propose, in the absence of appropriate enabling or supporting legislation within the relevant state or states. In such circumstances, the

¹¹⁵ APEEL suggest that the recognition of the proposed right to a clean and healthy environment could be picked up by the Commonwealth as a requirement that it presents to the states as a condition for securing approval of a particular SIP that is attached to an appropriate strategic instrument. It is unlikely that there would be an instrument devoted specifically and primarily to this topic, but if, for example, a new national clean air strategy or standard were to be adopted, the Commonwealth might be justified in stipulating this fundamental right as a measure it wishes to see adopted at the state level as one means of securing implementation of that instrument. The Panel believes the nexus between the particular instrument and the fundamental right in this instance would be sufficient to support such an approach by the Commonwealth.

¹¹⁶ The strength of this attitude is demonstrated by the fact that those states currently involved in challenging the validity of the *Clean Power Plan* have been working simultaneously on the preparation of their own implementation plans to cover the possibility that their legal action may fail. Whether this may change as a result of the election of President Trump remains to be seen, given the likelihood that the administration will try to withdraw the Plan.

Commonwealth will need to consider to what extent, and by what means, it could facilitate implementation of the relevant instrument through its own legislative measures. Even if this is not considered feasible or desirable, there is a further mechanism (conditional pre-emption) outlined below that the Panel recommends the Commonwealth be empowered to use as a means of inducement to secure state cooperation with respect to the taking of all actions, including the adoption of new legislation where necessary, provided for under a SIP.

APEEL do not consider that this scheme for the implementation of Commonwealth strategic environmental instruments at the state level would face constitutional difficulties in terms of the argument that it impinges upon the fundamental nature of a state's existence (see the discussion of constitutional powers above). The states will have a choice as to whether to develop implementation plans, and in so doing, to commit to any amendments of existing laws or adoption of new laws required to implement a particular measure. A failure to develop a SIP, or to secure approval for one, would have the consequence that the Commonwealth would do this job for the state concerned and may then use the conditional pre-emption mechanism where this appears necessary to ensure delivery of its implementation plan (see further below).

It is also desirable for implementation plans to be produced by relevant Commonwealth agencies in order to ensure that its strategic environmental instruments are fully implemented, where relevant, at the Commonwealth level. This would involve the relevant legislation requiring Commonwealth departments and authorities whose responsibilities and functions are covered by a particular instrument to produce Commonwealth Implementation Plans (CIPs) for approval by the proposed new Commonwealth environmental institution. There are two matters that will need to be addressed in order to ensure that Commonwealth is able to pursue implementation of its strategic environmental instruments via the development of CIPs. First, the Commonwealth needs to develop a more detailed system of environmental regulation that can be applied to activities undertaken by Commonwealth entities or on Commonwealth land; and second, it needs to be clear that the Commonwealth institution responsible for the administration of this system of environmental regulation, and hence for the development of CIPs to give effect to Commonwealth strategic environmental instruments, is separate and distinct from the Commonwealth institution that is responsible for developing such instruments and approving related CIPs.

The first issue arises because it is not possible, for constitutional reasons, for state environmental laws to apply to activities undertaken by Commonwealth departments, agencies and bodies or to activities undertaken on Commonwealth land.¹¹⁷ There is presently no environmental regulatory scheme at the Commonwealth level (equivalent to those established in each state) that will allow, for example, for the issue of environment licenses, protection orders and clean-up orders by the Commonwealth. This is a long-standing problem that has been of concern to state environment protection authorities for many years,¹¹⁸ for example, where site contamination has occurred on Commonwealth land, but is threatening or has caused groundwater contamination beyond the boundaries of such land. This paper has already addressed this issue in Recommendation 2.2 above by proposing that the Statement of Commonwealth Environmental Interests (SCEI) include a commitment to establishing such a regulatory scheme at the Commonwealth level.¹¹⁹

The second issue involves the avoidance of an obvious conflict of interest. Whichever Commonwealth institution is responsible for the implementation of strategic environmental instruments through this regulatory scheme should be responsible for developing the relevant CIPs, but their approval should be the responsibility of the Commonwealth institution that also is responsible for approving SIPs. There is an obvious need to separate the administration of the strategic environmental instruments scheme from the Commonwealth's environmental regulatory scheme so that they are performed by different entities. This would mean that any potential conflict of interest issue would thereby be avoided.

¹¹⁷ See *Australian Constitution*, ss 51–52 (and also s 109 with respect to activities of Commonwealth entities authorised by Commonwealth legislation). Note that although the *Commonwealth Places (Application of Laws) Act 1970* (Cth) provides for state laws to apply to Commonwealth places, it does not include planning and environmental protection laws.

¹¹⁸ See for example, Environment and Natural Resources Committee, Parliament of Victoria, *Report on the Environmental impact of Commonwealth Activities and Places in Victoria* (1994) (it should be noted that the Commonwealth refused to participate in this Inquiry).

¹¹⁹ The alternative solution, of having the Commonwealth accept the application of state environmental and planning laws to its activities and places, has never appeared to have been acceptable politically to the Commonwealth, and the Panel has opted therefore for the alternative solution of having the Commonwealth establish its own environmental regulatory scheme to cover these situations.

RECOMMENDATION 2.5

*The implementation of each Commonwealth strategic environmental instrument should be addressed at first instance by the development of an **implementation plan** by each state (and also any affected Commonwealth agency) for approval by the relevant Commonwealth environmental institution, which should also have the power to:*

- (i) develop such a plan for states that fail to do so; and*
 - (ii) to accredit state environmental legislation and administrative arrangements through an approved implementation plan.*
-

2.3.4 Mechanisms for securing state involvement

There is a significant practical question as to what can be done to ensure that the states will cooperate in the implementation of strategic environmental instruments developed by the Commonwealth. This paper has already discussed the challenge in relation to the development of implementation plans by the states, but there is also the question of ensuring that the states perform the actions required of them by SIPs for the purpose of implementing strategic environmental measures. These actions may include the amendment of relevant legislation, adoption of new legislation, reorganisation of administrative arrangements and the eventual attainment of any goals, targets or standards that may be prescribed by such measures. This is a fundamental aspect of the reforms that the Panel is proposing to the current model of environmental federalism, as it cannot be assumed that the states will readily embrace and engage with this radically different scheme. Once more, this paper will draw to some extent on the approach and experience in the United States to propose some means by which this practical challenge can be addressed.

The Panel believes there are two specific mechanisms that the Commonwealth can employ in a complementary manner which will help to secure state cooperation with respect to both the development of SIPs and their subsequent implementation. These tools take the form respectively of a carrot and a stick:

- the ‘carrot’ is the **provision of financial assistance by the Commonwealth to the states** to support their implementation efforts; and
- the ‘stick’ is the threat of **conditional pre-emption of state regulatory powers**¹²⁰ where states fail to cooperate in the implementation of Commonwealth strategic environmental instruments or, despite making some effort to do so, fail to attain the goals, targets or standards established by such instruments.

The Panel envisage that in most circumstance these mechanisms would operate alongside each other, with the common factor being the preparation by the states of SIPs which, once approved by the Commonwealth, would pave the way for the provision of financial assistance to assist with implementation at the state level, whilst also avoiding the threat of Commonwealth pre-emption of relevant state legislation. As noted above, it is open to states to elect not to prepare a SIP in relation to a particular Commonwealth strategic environmental measure, in which case they would be ineligible for any Commonwealth financial assistance linked to that measure. In such circumstances, the Panel has proposed that the Commonwealth would be empowered to prepare a SIP for the relevant state; should the state fail subsequently to pursue the measures provided for in this Plan, the sanction of conditional pre-emption would then come into play, thus providing an additional and powerful inducement for state cooperation from the outset.

¹²⁰ This paper describes this mechanism as ‘conditional pre-emption’ because it would only come into operation in the event that a state fails to cooperate in the implementation of a national strategic environmental measure and could cease to operate at a future date where state implementation comes into play; in this respect, it is different from full pre-emption, which involves the permanent and unqualified over-riding of inconsistent state legislation in all circumstances by a particular Commonwealth law.

APEEL believe that each of these tools has a clear constitutional foundation. In the case of financial assistance, this is provided by section 96 of the *Constitution*, which provides that the Commonwealth Parliament ‘may grant financial assistance to any State on such terms and conditions as the Parliament thinks fit’. In relation to conditional pre-emption, this is provided by section 109 of the *Constitution*, which renders invalid any state law to the extent that it is inconsistent with a valid law of the Commonwealth. There has been extensive past experience with the use of section 96 to achieve particular outcomes desired by the Commonwealth (including with respect to environmental matters), but little or no experience with the use of section 109 on a conditional basis for such purposes (unlike the US, where conditional pre-emption has been a cornerstone of federal environmental regulation).¹²¹ This paper will set out next some more detailed proposals concerning how each of these mechanisms might be used by the Commonwealth.

RECOMMENDATION 2.6

The Commonwealth should pursue state cooperation with respect to the development and implementation of national strategic environmental instruments by:

- (i) providing financial assistance to the states to support their implementation efforts, and*
 - (ii) using the mechanism of conditional pre-emption of state regulatory powers, in particular with respect to environmental assessment and approval, where states fail to cooperate in the implementation of national instruments or to attain the goals, targets or standards established by such instruments.*
-

2.3.4.1 Direct financial assistance

With respect to **Commonwealth direct financial assistance to the states**, the Panel notes that this would provide the opportunity for states to choose the particular regulatory measures and administrative arrangements that they prefer to rely upon for the purpose of implementing Commonwealth strategic environmental instruments, subject to the accreditation of these by the Commonwealth via an approved SIP. Relevant measures can be designed by the states to suit their individual political, geographical and economic circumstances and there will also be the opportunity in most circumstances for states to set more stringent targets or standards if they so desire.

In light of the High Court’s decisions in the *School Chaplain’s* cases, discussed above, the financial assistance to be provided by the Commonwealth should be based upon section 96 specific purpose grants rather than the exercise of the Commonwealth’s executive powers (see the discussion of this issue above, in section 2.1 above on the constitutional dimension of environmental federalism). APEEL envisage that the Commonwealth would adopt specific financial assistance legislation under section 96 of the *Constitution* that would tie the availability of state funding for particular strategic environmental measures to the provision by the states of satisfactory SIPs. There are precedents for such legislation in the form of the *Natural Resources Management (Financial Assistance) Act 1992* (Cth), which formalised the Land Care scheme, and the *Natural Heritage Trust Act 1997* (Cth), which dedicated part of the proceeds of the sale of Telstra to various environment-related purposes. Both Acts provide for the establishment of a special account from which grant payments may be made to the states and for grants to be made subject to conditions be set out in agreements with the states for each grant. The 1992 Act also sets out additional conditions that will apply to all Commonwealth grants under its provisions (for example, regarding the return of moneys in the event of non-

¹²¹ For a revealing description of the USA experience, see Ryan, above n 4, 355–418, in particular the discussion of the tools of environmental federalism that have been utilised in the USA (at 400–412).

performance, auditing etc.).¹²²

In order for this mechanism to work, it clearly will be necessary for the Commonwealth to make available appropriate levels of funds that can be distributed by way of grants to the states. There are two potential challenges to be addressed in this regard. First, there is the question as to how the Commonwealth will raise the funds required for its various financial assistance schemes. This paper addresses this question in the final section below. Second, there is the question of how to ensure that those in office within the Commonwealth government from time to time remain committed to providing adequate funds for this purpose and do not use cuts in funding to undermine the effectiveness of the system. A concern has arisen in the United States in recent years with respect to substantial decreases in EPA grants to the states to assist their implementation of federal standards and other schemes.¹²³ These decreases have been a consequence of reductions in the EPA budget through the Congress, and it seems likely that further reductions will occur under the Trump administration.

APEEL envisage that the administration of the state grants scheme would be undertaken by the Commonwealth environmental institution that is responsible for adopting strategic environmental instruments and negotiating state implementation agreements, including the making of grants agreements with the states. But it will be necessary for the Commonwealth to allocate the necessary funds to this institution for this purpose, and it is in this regard that there may be a difficulty should a particular government decide to substantially reduce the relevant allocation.

If the scheme were to depend entirely on annual appropriations for this purpose, this might constitute a constant threat to the efficacy of the scheme. However, the Panel believe that this potential difficulty could be avoided to a considerable extent by creating a special account and enabling the Commonwealth environment institution to apply the income from this account to support grants to the states. The account could be designated as an Environmental Future Fund and be managed in a similar manner to the Australian Future Fund established in 2006, which now comprises almost \$143 billion allocated across five separate funds.¹²⁴ APEEL believe there is an overwhelming argument for the establishment of a similar 'future fund' for the environment to support and underpin the strategic leadership role that it recommends be assumed by the Commonwealth. This option is discussed further below.

RECOMMENDATION 2.7

The Commonwealth should adopt specific financial assistance legislation under section 96 of the Australian Constitution that would:

- (i) tie the provision of grants to the states in relation to particular Commonwealth strategic environmental instruments to the provision by the states of acceptable State Implementation Plans (SIPs) and the carrying out of any reform initiatives prescribed therein; and*
 - (ii) provide for the establishment of an Environmental Future Fund, the income from which would be used to support such grants to the states.*
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¹²² Also note an interesting provision in the *Federal Financial Relations Act 2009* (Cth) concerning the making of partnership payments to the states that might be adapted to this specific context (s 16):

'The Minister may determine that an amount specified in the determination is to be paid to a State specified in the determination for the purpose of making a grant of financial assistance to:

(a) support the delivery by the State of specified outputs or projects; or
(b) facilitate reforms by the State; or
(c) reward the State for nationally significant reforms'.

It is clear from this provision that it is possible for the Commonwealth to link direct financial assistance to the states to the undertaking of specified 'reforms' by the states, which is assumed may include both legislative and administrative initiatives. Where such initiatives have been agreed with a state through an approved SIP, APEEL envisage a similar statutory scheme being developed for state grants that are linked to the implementation of such initiatives by the state concerned.

¹²³ See Environmental Council of the States (ECOS), 'Statement on President's FY 2017 Budget' (Press Release, 9th February 2016, available at <<http://www.ecos.org/documents/statement-on-the-presidents-fy2017-budget/>>.

¹²⁴ See Future Fund, *Future Fund: Australia's Sovereign Wealth Fund* (2017) Future Fund <<http://www.futurefund.gov.au/>>.

2.3.4.2 Conditional pre-emption

To understand the system of **conditional pre-emption** that this paper proposes as a means of providing a strong sanction for states that fail to contribute to the implementation of particular strategic environmental instruments, it is necessary once more to refer briefly to the US experience in this regard.¹²⁵ Conditional pre-emption has been described as the ‘classic model’ of cooperative environmental federalism in US environmental law.¹²⁶ It has its origins in a range of federal Acts adopted by the US Congress in the 1970s - including the *Clean Air Act 1970*, the *Clean Water Act 1972*, the *Safe Drinking Water Act 1974*, the *Resource Conservation and Recovery Act 1976* and the *Surface Mining Control and Reclamation Act 1977*. Each of these Acts has enabled the adoption of federally-designed national programs in which the states have been invited to participate by pursuing implementation action in ways that best suit their own needs. Those states that fail to participate face the prospect of the federal government adopting Federal Implementation Plans for their jurisdiction and then directly regulating particular activities within their boundaries by pre-empting any conflicting state law. In each instance, the threat of conditional pre-emption is accompanied by an alternative in the form of an offer of federal financial assistance for state implementation programs. Under the *Clean Air Act*, there is an additional and unique threat of the loss of other, existing federal financial assistance in the form of highway funds for failure to cooperate. In the vast majority of cases, states have elected to prepare and pursue the implementation of SIPs rather than forgo financial assistance and face pre-emption of their own regulatory powers. In practice, as Professor Erin Ryan has insightfully described in her book, *Federalism and the Tug of War Within*,¹²⁷ state and federal governments engage in ongoing consultation, negotiation and compromise with respect to both the development and subsequent implementation of SIPs or equivalent arrangements.

The question therefore is whether a system of conditional pre-emption similar to that which has been employed in the US could be developed in Australia? Whilst section 109 of the *Constitution* offers a similar mechanism to the pre-emption doctrine in the US, it will be necessary to determine, first, in what circumstances it might be applied by the Commonwealth; second, which Commonwealth environmental legislation potentially could operate in a pre-emptive manner so as to replace equivalent state measures; and third, the procedural steps required to trigger a conditional pre-emption, and also to revoke it where a state has subsequently committed to implementation.

In relation to the first of these matters, APEEL envisage that conditional pre-emption would be an option where the Commonwealth environmental institution administering the overall strategic instruments scheme has made a formal determination that a particular state is a ‘non-implementing State’ in relation to a particular strategic instrument as a result of the failure by the state to (i) secure an approved state implementation plan; (ii) to undertake the legislative and/or administrative reforms identified in a SIP as essential for the purposes of implementation of the instrument (and thereby achieving accreditation of its relevant arrangements); or (iii) to adequately implement the relevant instrument under its accredited legislative and administrative arrangements (for example, a prolonged failure to attain targets or goals identified in the relevant instrument).

Turning to the second question concerning which Commonwealth legislation might pre-empt corresponding state laws, the Commonwealth is in a position that differs substantially from that of the federal government in the US, where there are detailed federal regulatory schemes under its environmental legislation concerning clean air and water, wastes, hazardous chemicals, site contamination etc. that can operate in place of equivalent state legislation where states are not cooperating with respect to the implementation of federal standards. There is no current Commonwealth legislation of an equivalent, wide-ranging nature in terms of establishing environmental regulatory measures that can over-ride equivalent state provisions. The Panel do not propose that the Commonwealth should adopt such wide-ranging legislation except with respect to activities involving Commonwealth entities and places, given the range of such measures already in place at the state level. The Panel believe that this therefore leaves the Commonwealth’s environmental assessment and approval (EAA) measures, currently found in the *EPBC Act*, as the primary vehicle for the exercise of the pre-emption mechanism so as to over-ride equivalent state EAA measures.

¹²⁵ There is a vast body of scholarly literature on this subject in the USA. See for example, W Buzbee (ed), *Pre-emption Choice: The Theory, Law, and Reality of Federalism’s Core Question* (Cambridge University Press, 2009) For a recent, in depth survey, see Robbins, above n 3.

¹²⁶ Ryan, above n 4, 404.

¹²⁷ Ryan, E., *Federalism and the Tug of War Within* (Oxford University Press, 2012).

APEEL propose that wherever the Commonwealth has made a formal determination that a particular state is a ‘non-implementing’ state, it could trigger the pre-emption of state environmental assessment laws and any other related state law concerning environmental approvals and licences (for example, planning legislation that requires approval for various types of land development and environmental protection laws that require environmental approvals and licenses for prescribed activities) where this is considered necessary to facilitate the implementation of the particular strategic instrument within that state. This would mean that the Commonwealth EAA measures would operate to the exclusion of these equivalent state laws in relation to any **newly proposed activities involving matters of national environmental significance within a ‘non-implementing’ state.**

APEEL do not propose that this would constitute a general form of pre-emption covering all activities involving MNES; instead, it would be necessary to introduce an alternative test for the triggering of the Commonwealth EAA process in these particular circumstances (in place of the current test of likely significant impact on the particular MNES), based on a finding that **the activity involving an MNES would be likely to impact significantly upon the implementation of the particular strategic instrument within the relevant state.**

Under this approach, the Commonwealth EAA measures would apply in place of all equivalent state measures wherever proposed actions involving MNES are determined by the Commonwealth to have sufficiently significant potential impacts upon the implementation of a strategic environmental instrument to trigger the operation of its EIA procedures. Correspondingly, the relevant state planning and environmental authorities would no longer have any regulatory powers with respect to such activities. Whilst this might appear to represent a potentially substantial transfer of regulatory powers to the Commonwealth, it must be remembered that such pre-emption is likely to be relatively rare in practice, if the US experience in this regard is any guide, and that it would be applicable only within a particular state that was not cooperating sufficiently in terms of the implementation of a particular Commonwealth strategic environmental instrument. APEEL do not see this approach therefore as being likely to result in any substantial or wholesale shift of regulatory responsibilities from the states to the Commonwealth.

There is a contrary argument that could be made in this particular context that the threat of pre-emption with respect to proposed activities involving MNES within a state is relatively hollow if, as recommended below, the Commonwealth EAA process is going to operate alongside the equivalent state measures anyway. Under this reasoning, it is suggested that the states may feel they have relatively little to lose by risking pre-emption, given the Commonwealth is engaged anyway in the assessment and approval of MNES-related activities. There is some force to this argument, but it is difficult to predict whether states would be prepared to forgo control over such activities in order to remain outside the reach of a particular strategic instrument. The US experience in this regard may not be readily translatable to the Australian context, given the more limited level of pre-emption involved. However, it is envisaged that this form of pre-emption would be supplemented by two, additional forms of pre-emption that would provide a substantial disincentive to states to refrain from the action needed to effectively implement a strategic environmental instrument.

The need for these additional forms of pre-emption may arise in two particular circumstances:

- first, where there are **new activities of a prescribed kind that do not involve MNES**, but which may be potentially significant in terms of ensuring the successful implementation of a national strategic environmental instrument within a ‘non-implementing’ state; and
- second, where there are **existing activities of a prescribed kind that are operating under state environmental approvals and licences**, but which may need to undertake additional action beyond that required under those approvals and licences in order to contribute to the future implementation of a SIP within a ‘non-implementing’ state.

With respect to the first of these situations, it would be a relatively straightforward matter for the future generation Commonwealth environmental legislation to stipulate that its provisions will override any state measures with respect to environmental approvals and licences in **relation to any new activities of a prescribed kind that may have a significant impact upon the implementation of a national strategic instrument.** In other words, the Commonwealth could extend the scope of its EAA measures (and their pre-emptive effect over equivalent measures within a

particular state) to particular activities besides those involving MNES in order to ensure the effective implementation of a particular Commonwealth strategic environmental measure in a 'non-implementing' state.¹²⁸ This mechanism would provide an extremely powerful incentive for states to cooperate fully in the development and implementation of SIPs as it would expand considerably the range of activities over which they would lose jurisdiction in terms of environmental assessment and approval if they fail to do so. Once again, it should be emphasised that APEEL do not see this process as being likely to involve a wide-scale transfer of regulatory functions from the states to the Commonwealth in practice, as it is likely the sheer threat of pre-emption will induce state cooperation in most instances.

Turning to the second situation, where it appears necessary for **existing activities** that are subject to state environmental regulation to undertake some additional action to assist with the implementation of a national strategic environmental measure, and it is evident that a state is not acting to require such action by the regulated parties, the Commonwealth could require those conducting particular activities of a prescribed nature (being activities which it is considered may influence substantially the implementation of the relevant strategic environments instrument) to submit an **Environmental Improvement Programme** (EIP) to the Commonwealth for its approval. This particular regulatory mechanism has been employed in a number of states to secure significant upgrades of existing facilities that are failing to meet acceptable levels of environmental performance (for example, in relation to clean air or water standards).¹²⁹ An EIP would need to set out how the particular activity will make the adjustments necessary to ensure that it is contributing adequately to the implementation of the relevant National Strategic Environment Instrument and its related SIP. The relevant Commonwealth legislation should provide that, if there is any inconsistency between the requirements applicable to the activity under state environmental legislation and the obligations arising from an EIP approved by the Commonwealth, the latter would prevail.¹³⁰

Whilst taken together, these three forms of conditional pre-emption may appear to be draconian in nature, but the experience in the US, as is already noted, is that conditional pre-emption is used rarely in practice and that, instead, the threat to do so activates a process of negotiation and compromise that usually serves to address the particular situation. This has proved to be so even though US federal environmental legislation provides extensive opportunities for citizen enforcement action for non-compliance, including where state non-attainment of federal standards is evident. Such enforcement actions have been relatively rare in practice and, instead, it has been the use of negotiated approaches by the EPA with non-implementing states that have generally produced substantial outcomes.¹³¹ APEEL are of the opinion that if the full range of pre-emption options is provided to the Commonwealth in its next generation of environmental legislation, there is good reason to believe the American experience could be replicated in Australia.

APEEL are also of the view that the operation of this system would be considerably enhanced, given its highly negotiable character, by having the proposed Commonwealth environmental institution responsible for the strategic environmental instruments scheme establish a regional office in each state through which many of the relevant negotiations with state counterparts would be undertaken. This offers a far more suitable, and potentially acceptable, model from the state perspective than does one based on a central authority in Canberra performing these functions at a substantial distance from the counterpart state authorities. Experience in the US suggests that the regionalisation of federal agencies has been a significant factor in developing effective working relationships between the regional offices and state governments and their environmental agencies.¹³² This paper pursues further consideration of this idea in the section below concerning the proposed new federal environmental authority.

128 In terms of the constitutional basis for such a provision, the Panel believe it would be possible for the Commonwealth legislation to cover such activities where they are being undertaken by a trading corporation or by any party for the purposes of interstate or overseas trade and commerce. It may also be possible to extend the reach to activities that are directly linked to the implementation of particular international treaty obligations. Whilst this may not achieve a total coverage of all relevant activities (for example, where undertaken by individuals or partnerships, but not for the purposes of trade and commerce), the reach of the relevant provisions would nevertheless be likely to be quite extensive in practice.

129 See for example, the *Environment Protection Act 1993* (SA) s 54, which enables the South Australian Environment Protection Authority to include a condition in an environmental authorisation that enables it to require a licensee to prepare an environmental improvement programme which may include requirements to take specified action to give effect to the provisions of a state environmental protection policy.

130 Once again, with respect to the constitutional basis of such a provision, the Panel believe the same approach could be adopted as outlined above n 128.

131 E Hammond and D Markell, 'Administrative Proxies for Judicial Review: Building Legitimacy from the Inside-out' (2013) 37(2) *Harvard Environmental Law Review* 313.

132 See D Owen, 'Regional Federal Administration' (2016) 63 *UCLA Law Review* 58, 58 arguing that 'Federal decentralization undercuts conventional wisdom about the relative advantages and disadvantages of state (or local) and federal governance and offers nuance to theories explaining how a federalist system actually functions, plus new possibilities for policy reforms designed to promote innovative, responsive governance'. For details of the EPA Regional Offices, see United States Environmental Protection Agency, *EPA Organization Chart* (2017) Environmental Protection Agency <<https://www.epa.gov/aboutepa/epa-organization-chart>>.

With respect to the third matter concerning **the process for initiating the operation of the conditional pre-emption mechanism**, APEEL believe this could be done with respect to specific Commonwealth strategic environmental instruments by regulations made pursuant to the parent Commonwealth Act. This would mean that any recommendation concerning pre-emption made by the Commonwealth institution administering the strategic instruments scheme would need to be acted upon by the Commonwealth Environment Minister through an instruction to prepare the necessary regulations, and would thus also be subject to a disallowance motion in the Commonwealth Parliament. In this regard, all of the arguments that are canvassed above concerning the process for the making of Commonwealth strategic instruments are applicable in this context also. APEEL recognise that there is the potential for this significant aspect of the overall strategic instruments scheme to be undermined by a Commonwealth government (or parliament) that is antipathetic or hostile to it. However, on the other hand, this process also presents the opportunity for greater political ‘buy-in’ through the involvement of the Commonwealth Environment Minister and the Commonwealth Parliament in any action of a conditionally pre-emptive nature.

It also will be necessary for the Commonwealth environmental legislation to provide for the revocation of a conditional pre-emption (both primary and secondary) where a state has demonstrated that it is prepared to take all action necessary in the future to secure effective implementation of a Commonwealth strategic measure within its boundaries. This will require the Commonwealth legislation to set out a process whereby the relevant state would resume responsibility for oversight of those activities that were dealt with by the Commonwealth during the period of pre-emption. This may need to involve a re-issue by the relevant state environmental authority of any approval granted by the Commonwealth with at least the same conditions applicable. The state authority would then also take over responsibility for administering its own compliance and enforcement measures in relation to these activities.

RECOMMENDATION 2.8

The next generation of Commonwealth environmental legislation should provide that, where the Commonwealth considers a state has not acted sufficiently to implement a Commonwealth strategic environmental instrument, regulations may be made pursuant to the legislation to conditionally pre-empt (cf., over-ride) the operation of state environmental laws concerning:

- (i) the approval/licensing of new activities involving matters of national environmental significance (MNES);*
- (ii) the approval/licensing of other prescribed kinds of new activities; and*
- (iii) the environmental regulation of existing activities of a prescribed kind, including with respect to requiring improved environmental performance,*

wherever any such activity is considered by the Commonwealth to be likely to impact significantly upon the implementation of the relevant Commonwealth strategic environmental instrument.

2.3.5 Mechanisms for ensuring Commonwealth implementation

Whilst this paper has focused above on the means by which state involvement with the development and implementation of Commonwealth strategic environmental instruments can be encouraged, another serious question that needs to be addressed is how this scheme would operate in the event that a Commonwealth government was disinclined or strongly opposed to the idea of developing such instruments in the future, or to pursuing the implementation of those that had already been adopted. This situation might arise because of a political/philosophical belief within the Commonwealth government of the day that environmental matters do not have the required priority to warrant such action or simply through a reluctance to invest the resources required for the development and

oversight of the implementation of such measures. This paper has already addressed this issue to some extent above, however it is also possible to develop some specific accountability mechanisms that would help to ensure the ongoing involvement of the Commonwealth government in this scheme.

2.3.5.1 Role of a proposed Commonwealth Environmental Auditor

This paper discusses further below the mechanisms for ensuring the effective implementation of environmental law generally and canvasses here the possibility of establishing an office of Commonwealth Environmental Auditor which would have responsibility for reviewing and reporting on the environmental governance performance of the Commonwealth. One aspect of this responsibility could be for this body to consider whether the relevant Commonwealth environmental institution has failed to develop appropriate national strategic environmental instruments and to make recommendations for action by it in this regard.¹³³ This oversight function could extend to identifying and reporting on situations where the Commonwealth has failed to take necessary action to implement strategic instruments through its own agencies.

2.3.5.2 Federal Court of Australia review functions

Another option, which is likely to be more controversial in nature, could be to allow for interested parties to seek orders from the Federal Court to compel the relevant Commonwealth environmental institution to undertake the preparation of a particular instrument or to pursue implementation action, including by way of triggering conditional pre-emption. Inevitably, this would raise questions concerning the maintenance of a proper separation between the judicial, legislative and executive powers, particularly as Australian courts have displayed a reluctance to become involved in 'policy' matters when exercising their judicial review powers.

There are examples elsewhere in the world in recent years of where courts have heard cases of this nature and ordered action to be taken by governments to address particular environmental problems. The Indian Supreme Court has been particularly active in this regard,¹³⁴ and more recently, a Dutch court in the *Urgenda* case ordered stronger action on climate mitigation to be pursued by the Dutch government.¹³⁵ Very recently, in the United States, a District Federal Court in Oregon allowed proceedings to be brought by minors and a NASA climate scientist seeking orders to compel action by the federal government on climate change.¹³⁶ The action will now proceed to trial where issues related to the existence of a public trust in the atmosphere will be contested.

As the urgency and seriousness of issues such as climate change and biodiversity loss become more apparent, courts elsewhere are taking it upon themselves to order appropriate policy responses by reluctant or indifferent governments. This is a trend that seems likely to increase and the Panel do not think it is unrealistic or inappropriate to propose that express provision should be included in the next generation of Commonwealth environmental legislation for orders to be sought by third parties from the Federal Court requiring the Commonwealth institution to develop a strategic environmental instrument with respect to a matter that requires such action and to take follow-up implementation action to ensure its effective operation.¹³⁷

¹³³ APEEL also considers it would be appropriate for the Commonwealth Environment Minister to have the power to direct the proposed Commonwealth institution to develop a strategic instrument with respect to a particular matter.

¹³⁴ See for example, G Sahu, 'Implications of India Supreme Court's Innovations for Environmental Jurisprudence' (2008) 4 *Law, Environment & Development Journal* 375; R Jain, *The India Supreme Court as Environmental Activist* (24 January 2014) *The Diplomat* <<http://thediplomat.com/2014/01/the-indian-supreme-court-as-environmental-activist/>>.

¹³⁵ The English translation of the ruling is available from the website of the court, see de Rechtspraak, *Uitspraken* (2015) de Rechtspraak <<http://uitspraken.rechtspraak.nl/inziendocument?id=ECLI:NL:RBDHA:2015:7196>>. It should be noted that the decision is currently subject to an appeal by the Dutch government. For an Australian critique, see K Lake, *What does the Dutch court ruling on climate targets mean for Australia?* (26 June 2016) *The Conversation* <<https://theconversation.com/what-does-the-dutch-court-ruling-on-climate-targets-mean-for-australia-43841>>.

¹³⁶ *Juliana v United States* (D Or, No 6:15-cv-01517-TC, 10 November 2016) to order see Our Children's Trust, *Landmark US Federal Climate Lawsuit* (2017) Our Children's Trust <<https://www.ourchildrenstrust.org/us/federal-lawsuit/>>. For a review of the preliminary decision, see M Scanlan, 'Juliana v United States: Does the Constitution Guarantee a Liveable Planet for our Kids?' *Vermont Top 10 Environmental Watch List 2017*, available at <<http://vjel.vermontlaw.edu/topten/juliana-v-united-states-constitution-guarantee-liveable-planet-kids/>>.

¹³⁷ Note, in suggesting this idea, that the Panel have also considered the possibility of vesting a power in the Commonwealth Environment Minister to over-rule a strategic environmental instrument on 'public interest' grounds; there is no reason why any such ruling should not also be judicially reviewable, though it is recognised that it may be difficult to persuade a Court to make an adverse finding in such circumstances. On the other hand, it is acknowledged that a failure by the Minister to develop regulations to put into operation a primary or secondary conditional pre-emption with respect to a particular strategic instrument, which involves in essence a legislative action, may be a step too far in terms of possible judicial review.

This issue of Commonwealth reluctance with respect to the scheme for strategic environmental instruments could also arise where such measures have been developed by the Commonwealth, but it has subsequently failed to secure the required state implementation plans or to adopt one for a non-participating state. There is also the possibility that even where the Commonwealth has done so, it has not followed up with consequential action in the form of conditional pre-emption where a SIP is not being adequately implemented by a state.

In the first of these particular circumstances, the Panel believe it is appropriate for an application to be able to be made to the Federal Court by an interested party for an order to compel the Commonwealth environmental institution to produce a Commonwealth drafted implementation plan for the relevant state. However, more complex legal issues will be involved in relation to any case involving a claim that a state has not adequately implemented a particular SIP and should be subject therefore to consequences in the form of the conditional pre-emption actions outlined above. Similar issues were involved in the litigation brought some years ago by then Senator Bob Brown in which it was claimed that the Tasmanian *Regional Forestry Agreement (RFA)* was not being properly implemented by the Tasmanian government and that the Commonwealth should therefore resume regulation of forestry activities in Tasmania under the *EPBC Act*.¹³⁸ The Federal Court at first instance was prepared to make a ruling in favour of the applicant and it was only due to changes to the *RFA* that were introduced by the Commonwealth after this decision that the case was lost on appeal.¹³⁹

APEEL do not consider it will place an inappropriate burden on the Federal Court to empower it to hear applications of this nature in the future, should this scheme be developed by the Commonwealth. It is essentially a matter of having the Court determine whether there has been substantial compliance with the obligations imposed in a SIP or CIP, a task that the Federal Court at first instance in the Tasmanian *RFA* case was prepared to undertake with respect to the obligations spelled out in the particular *RFA*. The appropriate order in circumstances where the Court concludes that a state has substantially failed to perform its obligations under a SIP or CIP would be to require the relevant Commonwealth environmental institution to activate the conditional pre-emption powers that are outlined above. However, as noted above, the mechanism by which conditional pre-emption would ultimately be brought into operation would be by way of regulations made at the direction of the Environment Minister, following a request from the Commonwealth environment institution. APEEL acknowledges that a failure by the Environment Minister to develop such regulations with respect to a particular strategic instrument, which involves an action of a legislative nature, may be a step too far in terms of possible judicial review. However, where a court has ordered the Commonwealth environmental institution to trigger a conditional pre-emption by recommending to the Environment Minister that appropriate regulations should be adopted, there will at least be some significant pressure on the Minister to act on any such request. A judicial finding of inadequate implementation of a strategic instrument within a state should have strong persuasive effect in terms of the consequential action required of the Commonwealth Environment Minister.

Finally, there could also arise a question with respect to the failure by Commonwealth agencies to develop implementation plans with respect to their own activities that are affected by a Commonwealth strategic environmental measure, or to substantially perform obligations arising from implementation plans. In both situations, it is appropriate for an application to be able to be made to the Federal Court by interested parties for orders to compel the relevant Commonwealth agency to meet these obligations under the Commonwealth environmental legislation.

¹³⁸ *Brown v Forestry Tasmania (No 4)* [2006] 157 FCR 1.

¹³⁹ *Forestry Tasmania v Brown* [2007] 167 FCR 34; see also Bates, above n 6, 181 for a discussion of these cases.

RECOMMENDATION 2.9

To ensure that the Commonwealth performs its responsibilities with respect to the development and implementation of national strategic environmental instruments, the following safeguards should be incorporated within the next generation of Commonwealth environmental legislation:

- (i) vesting power in a new Commonwealth Environmental Auditor to monitor the implementation by Commonwealth agencies of Commonwealth strategic environmental instruments and to make recommendations for action by such agencies where this appears necessary;*
 - (ii) to allow interested parties to request the Federal Court to order the relevant Commonwealth institution (see Recommendation 2.14 (i)) to:*
 - (a) undertake the preparation of a particular strategic environmental instrument;*
 - (b) undertake the preparation of an implementation plan where a state has failed to do so with respect to a particular strategic environmental instrument;*
 - (c) activate the conditional pre-emption powers where the Court is satisfied that a state has failed to perform the tasks required of it under a State Implementation Plan (SIP); and*
 - (iii) to allow parties to request the Federal Court to order non-complying Commonwealth agencies to develop implementation plans with respect to their own activities that are affected by a Commonwealth strategic environmental instrument, or to substantially perform obligations arising from their implementation plans.*
-

2.3.6 Compliance and enforcement considerations

Finally, this paper will offer some brief observations concerning the implications of the redesigned environmental federalism scheme proposed above in relation to compliance and enforcement action. Such action can involve the exercise of administrative remedies such as enforcement orders, or resort to the courts for both criminal sanctions and civil remedies (often in the form of injunctions or declaratory orders). In the United States, the particular way in which conditional pre-emption has operated has resulted in the possibility of enforcement action being pursued in the courts by federal environmental authorities (or third parties utilising citizen enforcement provisions to seek civil remedies) in relation to activities that are being regulated by the states under a SIP or other similar arrangement. The Panel do not see this approach as being possible, or necessary, under the scheme as proposed.

In the first place, Commonwealth strategic environmental measures are not regulatory instruments in the sense that they give rise to direct obligations that parties other than the states must meet. The only compliance and enforcement issues arising with respect to them are those canvassed above concerning the possible failure of state and Commonwealth governments respectively to perform their required duties under this scheme. As a result, there is no question arising from these measures with respect to compliance and enforcement action against parties undertaking activities that are potentially subject to environmental regulation.

In the normal course of events, it is the states who will be responsible for compliance and enforcement activity under their own legislation with respect to all regulatory requirements that are designed to implement a Commonwealth strategic environmental instrument. There is an ongoing challenge for most states in allocating adequate resources to ensure effective compliance and enforcement under their environmental legislation, but this could be addressed to some extent under the proposed system should the financial assistance provided by the Commonwealth to support

the implementation of Commonwealth strategic environmental instruments at the state level include an allowance for compliance and enforcement activity.

Should the Commonwealth find it necessary to respond to state inaction (including lack of compliance and enforcement action) with respect to a particular strategic environmental measure by invoking the mechanism of conditional pre-emption outlined above, it would then become responsible for undertaking any necessary compliance and enforcement action against parties that are not complying with the requirements imposed under the relevant Commonwealth laws. As noted above, where a conditional pre-emption is revoked as a result of a state demonstrating its capacity to effectively implement a Commonwealth strategic environmental instrument in the future, there will need to be a process whereby the relevant state resumes regulatory control over all activities that were approved by the Commonwealth during the period of pre-emption, including with respect to compliance and enforcement action.

Taking all of these considerations into account, the Panel does not see any particularly challenging issues arising with respect to compliance and enforcement matters under the proposed, redesigned environmental federalism scheme. Responsibility for such action would essentially remain with state environmental authorities in most circumstances, but could be reassigned to the Commonwealth in what is expected to be relatively rare circumstances where conditional pre-emption action has been undertaken by it. A consistent failure by a state to pursue necessary compliance and enforcement action, to the extent that it leads to a failure to substantially implement a particular Commonwealth strategic environmental measure, could expose it to the sanction of conditional pre-emptive action by the Commonwealth.

2.4 The Commonwealth's future regulatory role

To complete this examination of environmental federalism, this paper turns, finally, to the question of what regulatory role the Commonwealth should perform under the next generation of environmental laws. After addressing briefly the general elements of this topic, this paper examines the specific and contentious subject of the Commonwealth's role in environmental assessment and approval (EAA).

2.4.1 General elements

As noted above in the analysis of the existing legislative arrangements for environmental management, APEEL does not see the need for major changes to these complementary schemes and envisages a continued reliance upon them as part of a broadly cooperative approach between the Commonwealth and the states to environmental regulation. The above proposals for Commonwealth strategic leadership on environmental matters would sit alongside, and be in addition to, these existing legislative arrangements, except in replacing the current NEPC uniform legislative scheme. However, this paper advances below an argument for the continued operation of the Commonwealth's EAA process in a manner that overlaps equivalent state measures. Finally, as also noted above, APEEL believes there will be some limited circumstances in which the best environmental outcomes can be achieved through the Commonwealth adopting a comprehensive legislative scheme that over-rides any state law on the same subject-matter, particularly where this will mean that industries and markets will have a common and consistent set of environment standards to work with (for example, with respect to motor vehicle emissions).

RECOMMENDATION 2.10

The next generation of Commonwealth environmental legislation, in addition to providing for mechanisms to enable the Commonwealth to pursue a strategic leadership role on environmental matters, should include the following types of other legislative arrangements, as appropriate to the particular context:

- (i) the operation of **complementary legislative schemes** (for example, through uniform legislation or an applied law scheme) where the best environmental outcomes are likely to be achieved by apportioning roles and responsibilities between the Commonwealth and the states (for example, with respect to various risk regulation processes related to chemicals, genetically modified organisms, etc.);*
 - (ii) the operation of **an overlapping legislative scheme for environmental assessment and approval (EAA)** of activities that may impact significantly on matters of national environmental significance (MNES) (see also Recommendation 2.12); and*
 - (iii) the adoption of an **over-riding (pre-emptive) regulatory scheme** by the Commonwealth in the limited circumstances where the best environmental outcomes and market stability are likely to be achieved by such an approach (for example, in relation to motor vehicle emissions and ozone regulation).*
-

APEEL proposes one further recommendation concerning the Commonwealth's current legislative and administrative arrangements. Given the wide range of Commonwealth functions of a regulatory nature outlined in the overview above, the Panel sees value in a review of their operation. An important challenge for the Commonwealth is to identify opportunities to simplify its substantial body of environmental legislation, particularly with respect to the current institutional arrangements for its implementation. There is a multiplicity of Commonwealth administrative authorities charged with regulatory responsibilities under this wide array of legislation. The Panel believes there is a strong argument for reviewing all of the Commonwealth's existing administrative structures and regulatory functions to determine where opportunities may exist to consolidate these within a new Commonwealth environmental authority. Such a review is a task that is beyond the capacity of the Panel to perform, but it is suggested as something that could be undertaken in the near future by the Commonwealth as part of a wider commitment by it to a new strategic leadership role. This paper outlines below some options in relation to new Commonwealth environmental institutions, including a new authority that might constitute the locus for a consolidation of the existing, diverse regulatory functions performed by the Commonwealth.

RECOMMENDATION 2.11

The Commonwealth should review all of its existing administrative structures and regulatory functions to determine where opportunities exist to consolidate these within a new Commonwealth Environmental Protection Authority (CEPA) (see also Recommendation 2.14(ii)).

2.4.2 Environmental assessment and approval (EAA)

2.4.2.1 Overview of the current system

The broad architecture of the *EPBC Act*'s EAA provisions was developed in the 1997 *HOA* that was adopted through COAG. Once more, the Australian decentralised system of environmental federalism is clearly evident, with the states having a strong influence through the *HOA* on the design of the new Commonwealth EIA scheme. Some of the key elements of the *EPBC Act* that were determined via the *HOA* were as follows:

- that Commonwealth involvement in EAA would be limited to the 'matters of national environmental significance' (MNES) listed in Attachment 1 of the *HOA*;
- that the MNES could not be varied or added to by the Commonwealth other than in consultation with the states;
- that the Commonwealth has interests and obligations in relation to a wide range of other matters listed in Part II of Attachment 1 of the *HOA*, but that these matters could not serve to trigger the assessment and approval process of the Commonwealth;
- that the Commonwealth should rely on state processes as the preferred means of assessing proposals;
- that the *HOA* would not affect any arrangement made under a *Regional Forestry Agreement*; and
- that the Commonwealth would limit its decisions to only those aspects of a proposal related to MNES.

When the *EPBC Act* was passed in 1999, it generally reflected these design criteria. It provided for the application of its EAA provisions to activities involving 'matters of national environmental significance' (MNES). There are now nine MNES identified under the Act, as follows:

- (a) world heritage properties;
- (b) national heritage places;
- (c) wetlands of international importance (listed under the *Ramsar Convention*)
- (d) listed threatened species and ecological communities;
- (e) migratory species protected under international agreements;
- (f) Commonwealth marine areas;
- (g) the Great Barrier Reef Marine Park;
- (h) nuclear actions, including uranium mines; and
- (i) a water resource, in relation to coal seam gas and large coal mining development.

The range of MNES identified by the Act has been the subject of regular criticism for its failure to include additional matters - in particular, greenhouse gas emissions, land clearance and water-affecting activities. The introduction in 2013 of a 'water trigger' that is limited to certain types of water-affecting activities has partially addressed the last-mentioned matter, but the other two areas have remained outside the MNES list. A ten year review of the *EPBC Act* published in December 2009 (the Hawke Review) recommended that a new MNES be created with respect to 'ecosystems of national significance' and also suggested the introduction of an interim greenhouse trigger.¹⁴⁰ In its formal response to the Hawke Review, the Gillard government accepted the first of these recommendations but not

¹⁴⁰ Department of the Environment, Water, Heritage and the Arts (Cth), *The Australian Environment Act: Report of the independent review of the Environment Protection and Biodiversity Conservation Act 1999* (2009) Australian Government: Department of the Environment and Energy, available at <<https://www.environment.gov.au/resource/australian-environment-act-report-independent-review-environment-protection-and>>.

the second, arguing that its carbon price mechanism would meet that particular need.¹⁴¹ A discussion on the question of revisions to the list of MNES is addressed below.

This paper does not propose to provide here a detailed outline of the *EPBC Act*'s EAA provisions.¹⁴² Rather, it focuses its analysis below on the more fundamental question as to the justification for the Commonwealth EAA scheme. This question has been put in the spotlight by the recent attempts by the Commonwealth under its 'One Stop Shop' initiative to use the mechanism of approval bilateral agreements provided for in the Act to hand over its approval powers under the Act to the states.

2.4.2.2 Analysis

In addressing this issue, APEEL acknowledges at the outset the need for **procedural** harmonisation between Commonwealth and state EAA measures so as to avoid duplication with respect to the task of preparation of environmental assessment documentation by proponents and related public consultation activities. The use of procedures bilateral agreements under the *EPBC Act* has been a necessary step in this regard. However, APEEL believes the second generation of procedures bilateral agreements that were executed in 2014-15 has gone too far in delegating to state authorities full responsibility for the review of environmental assessment documentation, including the consideration of public submissions. If, as is proposed below, the Commonwealth is to continue to be involved in the approval of projects covered by its EAA legislation, then it should also have an active role in reviewing the environmental assessment documentation submitted by proponents, as a precursor to the making of approval decisions and, in particular, setting whatever conditions are to be attached to an approval. With this proposal in mind, this paper turns now to the question of whether (and why) the Commonwealth should retain its role with respect to environmental **approvals** in relation to projects covered by its EAA legislation.

The fundamental question in this context, which has been highlighted recently by the Commonwealth government's One Stop Shop initiative, is whether the Commonwealth should exercise a separate environmental approval function alongside state processes of a similar nature. In seeking to use the mechanism of approval bilateral agreements provided for in the *EPBC Act* to transfer its approval powers to the states, the Commonwealth has argued that the accreditation of state approval legislation through these agreements will result in higher and more consistent standards of performance on the part of the relevant state EAA systems (as was also suggested by the Hawke Review in its final report). By way of support for the One Stop Shop initiative, the mining and petroleum industries (including the coal seam gas industry), working closely with the Business Council of Australia (BCA), have argued that the handover of Commonwealth approval powers to the states is necessary in order to avoid duplication of functions that are already performed by the states and also to reduce alleged costs and delays incurred by industry in complying with the *EPBC Act*.¹⁴³

This Commonwealth's argument concerning the promotion of higher standards of EAA practice at the state level is attractive in theory but difficult to accept, given past practices in this context. First, there have been no significant improvements to state EAA processes that can be directly attributed to the execution of procedures bilateral agreements, despite overwhelming evidence that almost every state process is seriously deficient.¹⁴⁴ Furthermore, in recent times, some states have weakened their environmental approvals legislation, even whilst negotiating approval bilateral agreements with the Commonwealth.¹⁴⁵ Accordingly, there is little cause for confidence that higher standards would be achieved at the state level through the execution of approval bilateral agreements. Nor is there any clear

141 See Department of the Environment, Water, Heritage and the Arts (Cth), *Australian Government response to the report of the independent review of the Environment Protection and Biodiversity Conservation Act 1999* (2009) Australian Government: Department of the Environment and Energy <<https://www.environment.gov.au/resource/australian-government-response-report-independent-review-environment-protection-and>>.

142 The *Background Paper*, provides a detailed examination of the history of Commonwealth involvement in EAA dating back to its original legislation adopted in 1975 (the *Environment Protection (Impact of Proposals) Act 1974* (Cth)) and of the various, unsuccessful attempts to limit the application of this legislation.

143 See for example, A Hepworth, 'Companies urge war on environmental 'green tape'', *The Australian* (online), 11 April 2012 <<http://www.theaustralian.com.au/national-affairs/companies-urge-war-on-environmental-green-tape/news-story/07e52cd2a240d46da2fbdedbdf83cf9>>.

144 For a damning critique of state EIA processes, see the collection of case studies presented in T Bonyhady and A Macintosh, *Mills, Mines and Other Controversies: The Environmental Assessment of Major Projects* (Federation Press, 2010).

145 For example, in Queensland, through the *State Development, Infrastructure and Planning (Red Tape Reduction) and Other Legislation Amendment Act 2014* (Qld).

indication that the Commonwealth would vigorously undertake the ‘monitoring, performance audit and oversight’ functions indicated by the Hawke Review as an essential accessory to the accreditation of state processes under approval bilateral agreements.

Turning to the industry arguments based on alleged duplication of functions, APEEL believes these fail to acknowledge that the Commonwealth has pursued a highly coordinated and collaborative approach to the procedural aspects of its EAA process requirements through procedures bilateral agreements. Noted also, as outlined in *Background Paper*, is that it was the Commonwealth, not the states, which first entered the field of EIA in Australia, and that it could therefore be argued that it is the states who have duplicated the Commonwealth process. However, insofar as some duplication does exist with respect to environmental approvals, it may be argued that such duplication actually is beneficial in terms of the overall effectiveness of decision-making from an environmental federalism perspective. This view has been advanced by Hollander, who argues that having overlapping approval responsibilities enables a wider range of interests to influence the policy debate and ‘provides an additional arena to assess the merits of a proposed development’.¹⁴⁶

In the environmental federalism literature, this overlapping approach has been described as ‘polyphonic’ federalism,¹⁴⁷ a key feature of which is thought to be the presence of creative tensions between the federal and state levels. Contrary to commonly held assumptions about the benefits of avoiding duplication and overlap, it has been argued that ‘duplication, overlap and redundancy perform a useful function in a complex policy domain such as the environment where the science is uncertain and the politics fraught’ and that ‘overlapping responsibilities provide the opportunity for a wider range of interests to influence the policy debate, especially where there is a lack of agreement between the different governments...’.¹⁴⁸

There is also cause to question the arguments by industry concerning excessive costs and delays associated with the operation of the *EPBC Act*. For example, allegations of this nature contained in a submission by the BCA to COAG in April 2012 were found by an independent economic assessment to have been substantially exaggerated.¹⁴⁹ Galligan, in examining claims more generally by industry regarding excessive Commonwealth regulation, refers specifically to claims by the BCA concerning federal inefficiencies that ‘are probably exaggerated given that they take no account of other benefits of competition that might be accruing at the same time and they assume no additional costs associated with the proposed alternative’.¹⁵⁰ These observations seem apposite with respect to the Commonwealth’s EAA process.

It should also be noted that the level of costs genuinely incurred in complying with the *EPBC Act* process usually represents a small proportion of the overall project development costs for most major resource projects. Finally, it is important in terms of alleged delays associated with the Commonwealth EIA process to take into account that some may be attributable to the operation of state rather than Commonwealth processes, and also may be a consequence of proponents having failed to produce adequate scientific analysis in their draft environmental impact statements (EIS). None of these factors have been acknowledged or taken into account by industry critics of the *EPBC Act* or by the Commonwealth in advancing its One Stop Shop initiative.

The principal argument that has been advanced by opponents of the One Stop shop initiative is that the states, who are the victims of an extreme vertical fiscal imbalance under the Australian federal system, are overly influenced by the economic benefits that they perceive will flow from resources and other forms of development and are therefore not in a position to deal objectively with the consideration of MNES. This

¹⁴⁶ R Hollander, ‘Rethinking Overlap and Duplication: Federalism and Environmental Assessment in Australia’ (2009) 40 *Publius* 136, 155.

¹⁴⁷ See R A Schapiro, ‘From Dualism to Polyphon’ in W Buzbee (ed), *Pre-Emption Choice: The Theory, Law and Reality of Federalism’s Core Question* (Cambridge University Press, 2009) 33; E Ryan, *Federalism and the Tug of War Within* (Oxford University Press, 2012) (arguing for the recognition of ‘Balanced Federalism’ as a means of avoiding a zero sum game approach to environmental federalism in which a strict choice is to be made between federal or state responsibility).

¹⁴⁸ Hollander, above n 146, 137, 155.

¹⁴⁹ See Business Council of Australia, *Discussion Paper for the COAG Business Advisory Forum (April 2012)* Business Council of Australia, 5–6 <<http://www.bca.com.au/publications/discussion-paper-for-the-coag-business-advisory-forum-1>>; and for the critique, see Economists at Large, *A response to the Business Council of Australia’s Discussion Paper for the COAG Business Advisory Forum: On environmental assessments and approvals* (2012) Economists at Large <<http://www.ecolarge.com/work/response-to-bca-discussion-paper-on-environmental-assessment-and-approval/>>.

¹⁵⁰ B Galligan, Submission No 46 to Senate Select Committee on the Reform of the Australian Federation, Parliament of Australia, *Australia’s Federation: an agenda for reform*, April 2011, 2–3.

argument has been advanced, for example, by the Australian Network of Environmental Defenders Offices (a network of public interest environmental law firms):

‘Only the Commonwealth has the mandate and the willingness to consider the needs of the whole of Australia when approving projects that could affect the environment. A State government has no motivation to put the national interest before its own State interest when approving development within its own State’.¹⁵¹

There are examples in support of this argument, in the form of situations where the Commonwealth has needed to exercise its powers under its EAA and earlier world heritage legislation to refuse approval for state-supported, but environmentally damaging projects - including Fraser Island, the Franklin River dam and, more recently, the Traveston Crossing dam in Queensland. But the refusal by the Commonwealth to approve specific projects is not the only influence it can exert and is in fact a rarely exercised prerogative. A more pervasive influence has been exerted by the Commonwealth through setting conditions on environmental approvals that ensure more effective management requirements than might have been accomplished by state processes alone. This is, of course, a difficult benefit to measure exactly, given that the settling of conditions is usually the product of a consultative process between the Commonwealth and the relevant state, but nevertheless it is a significant one.

The Panel’s position is that it supports continued Commonwealth involvement in the assessment and approval of proposals or activities that may impact significantly on MNES, including (but not confined to) where this is necessary to ensure compliance with international obligations arising from various international treaties that have been entered into by Australia. Whilst APEEL accepts entirely the justification for the long-standing arrangements to harmonise the **procedural** aspects of Commonwealth and State EIA processes, the Panel does not support the use of approval bilateral agreements to accredit state **approval** processes as it considers the Commonwealth EAA scheme can provide an additional, arms-length evaluation of proposals of a kind that cannot be guaranteed at all times by the states.

APEEL recognises that the position adopted here with respect to this particular aspect of the Commonwealth’s environmental functions stands apart from a general support for the retention by the states of their existing environmental regulatory powers. However, the Panel are not suggesting that the states should relinquish their powers with respect to EAA in favour of the Commonwealth.¹⁵² Rather, as advocated in the literature canvassed above, the Panel believe that a ‘polyphonic’ system in which creative tensions may arise between the Commonwealth and state levels is the most appropriate federalism model in this particular context. This accords also with the proposition advanced above that there is no ‘one-size-fits-all’ approach or solution to the environmental federalism challenge and that different forms of environmental federalism may be utilised in various contexts. Having stated its position on this highly contested matter, APEEL wish to address next a number of additional matters which flow from the above conclusion, and to propose some substantial reforms to what is considered a far from adequate Commonwealth EAA process.

2.4.2.3 Options for reform

There has been extensive discussion concerning possible reforms to the EAA scheme under the *EPBC Act*, including the extensive examination undertaken through the Hawke Review several years ago. In this section, the paper will advance some suggestions for what are considered highly desirable reforms that should be incorporated into the component of the next generation of Australian environmental laws that addresses the subject of EAA.

¹⁵¹ Australian Network of Environmental Defenders Offices, *Objections to the proposal for an environmental ‘one stop shop’* (December 2013) Environmental Defenders Office NSW <http://www.edonsw.org.au/briefing_one_stop_shop>. See also C McGrath, ‘One stop shop for environmental approvals a messy backwards step for Australia’ (2014) 31 *Environmental and Planning Law Journal* 164.

¹⁵² It is necessary, however, to qualify this conclusion to take account of the proposals above for the Commonwealth to use the mechanism of conditional pre-emption where necessary to address a failure by a state to participate in the implementation of Commonwealth strategic environmental measures. As this paper notes above, this approach would not involve a complete over-riding of state EIA measures generally, but would apply selectively to particular states with respect to specific Commonwealth strategic environmental measures.

The first question this paper will address is whether it is appropriate for the Commonwealth to continue to limit its involvement in EAA to the examination of matters directly related to the relevant MNES which serves to trigger its involvement. The alternative would be for it to examine all environmental issues or impacts arising from the proposed activity, thereby duplicating the range of matters that would also be considered at the state level. This was, in fact, the situation which existed under the previous *Environment Protection (Impact of Proposals) Act 1974 (Cth) (EPIP Act)*, the validity of which was confirmed in the *Murphyores* decision in the context of export approvals. The Hawke Review of the *EPBC Act* in 2010 was equivocal on this matter, putting forward several options, one of which was that all environmental matters that a project impacts upon should be required to be considered by the Commonwealth.¹⁵³ The Panel supports this particular option on the basis that it is an unnecessarily artificial distinction to draw between impacts relating to MNES and those relating to environmental matters more generally.

APEEL also believe there should be a clearer direction to take into account cumulative impacts, which often are overlooked in the course of applying the EAA process. At the same time, the Panel advocates the adoption of a collaborative approach by Commonwealth and state agencies to the imposition of conditions on their respective approvals so as to avoid inconsistent or contradictory obligations being imposed on proponents. APEEL believes that such collaboration could be facilitated by the establishment of regional offices of the Commonwealth authority that is responsible for the administration of the Commonwealth EIA process. The Panel does not believe that there is any significant constitutional obstacle to the adoption of this wider assessment approach by the Commonwealth.

A second question relates to the range of MNES that can trigger the Commonwealth assessment and approval process. The Panel is of the view that the next generation of environmental laws should not be constrained in this respect by an intergovernmental agreement reached almost twenty years ago and that it is appropriate therefore to review and revise the range of MNES 'triggers' currently identified in the *EPBC Act* to ensure that they are reflective of contemporary and emerging environmental concerns. New matters to be considered for inclusion as triggers in the proposed SCEI should include ecosystems of national significance (as per the Hawke Review, recommendation 8), a greenhouse gas trigger (in the absence of any comprehensive Commonwealth legislative scheme in relation to climate mitigation, as recommended in Australian Panel of Experts on Environmental Law, *Climate Law* (Technical Paper 5, 2017)), and a vegetation clearance trigger - all of which have been canvassed in the past. APEEL does not preclude other possible triggers that might also be added by the Commonwealth.

A third question relates to the administration of the Commonwealth assessment and approval process, which presently lies primarily in the hands of the Commonwealth Environment Minister in relation to the key decisions as to whether to trigger the process and to grant approvals. This paper addresses in section 3 below, the need for the establishment of a new environmental institution or institutions by the Commonwealth and argue that any such institution should have independence from political direction with respect to the various responsibilities assigned to it. The Panel believe this independence should extend to the implementation of the Commonwealth's EAA process, which it proposes be vested in an independent Commonwealth Environment Protection Authority, thereby eliminating the current form of political involvement in this process. The reasons for recommending this change are set out in more detail in the section below where this paper outlines the proposals for new Commonwealth environmental institutions.

Fourth, APEEL believes that certain current exclusions from the operation of the *EPBC Act* have no place in the next generation of Commonwealth environmental laws. The Panel does not support the exemption from the Commonwealth EIA process of forestry operations covered by a *RFA*, given the considerable evidence that *RFAs* have not delivered adequate or effective outcomes at the state level, and believe this exemption should not be a part of the next generation of Commonwealth environmental laws.¹⁵⁴ APEEL also questions the appropriateness of recent steps by the Commonwealth to side step the application of the *EPBC Act* to offshore petroleum activities in Commonwealth waters by vesting authority solely in the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) under the *Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations*

¹⁵³ See Hawke Review, above n 140, Recommendation 25.

¹⁵⁴ See J Feehely, N Hammond-Deakin and F Milner, *One Stop Chop: How Regional Forest Agreements Streamline Environmental Destruction* (2013) Lawyers for Forests <<http://www.edotas.org.au/wp-content/uploads/2013/10/One-Stop-Chop-Final-report.pdf>>; EDO Tasmania, *State Forests, National Interests: A Review of the Tasmanian RFA* (May 2015) Wilderness Society; *Brown v Forestry Tasmania* (No 4) [2006] 157 FCR 1.

2009 (Cth). This new scheme has involved the issue of blanket approvals for all such activities under the *EPBC Act* pursuant to several strategic environmental assessments (SEAs) carried out thereunder. A recent evaluation of these arrangements by Professor Simon Marsden has offered a quite scathing conclusion as to their motive and effect:

‘SEA (re offshore petroleum activities) in Australia is, in reducing the regulatory burden rather than focusing on ESD, increasingly also becoming a fast-track process alongside certain project level assessments, whether they are of major significance or not. It is furthermore extremely difficult to see how reducing red tape in environmental legislation can, in the way proposed, be compatible with ESD’.¹⁵⁵

APEEL is of the view that the next generation of environmental laws should not allow for the privileging of particular industries or activities from the general schemes that they establish, including with respect to EAA. The mining and petroleum industries have successfully pleaded in many instances, particularly at the state level, for environmental regulation of their activities to be managed through the agencies responsible for the issue of relevant tenures rather than by environmental authorities. APEEL believes such special treatment is inappropriate and should not be permitted in the future, including in the particular instance discussed here of Commonwealth assessment and approval of offshore petroleum activities.

RECOMMENDATION 2.12

The Commonwealth should continue its involvement in the assessment and approval of activities that may impact significantly on matters of national environmental significance (MNES) alongside corresponding state processes, with the following reforms to the current process to be adopted:

- (i) that consideration be given to all environmental impacts (including cumulative impacts) associated with the proposed activity, not just those related to the relevant MNES;*
 - (ii) that the current list of MNES be expanded;*
 - (iii) that responsibility for the key decisions whether to trigger the process and to approve activities made subject to the Commonwealth process be transferred from the Environment Minister to a new, independent Commonwealth environment authority;*
 - (iv) that the exemption for operations covered by a regional forestry agreement be removed; and*
 - (v) that the exclusion of offshore petroleum activities from the EPBC Act process be terminated.*
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In addition to the above recommendations, which all relate to the scope of the Commonwealth EIA process and its administration by the Commonwealth, APEEL wish to draw attention to two substantive deficiencies which the Commonwealth EIA process shares in common with the equivalent state EIA processes. These are, first, inadequate arrangements for public participation in the EIA process, and second, a substantial failure to ensure post-approval monitoring of projects that have been made subject to EIA (or the related use of adaptive management to adjust the conditions applicable to particular projects where unanticipated environmental impacts have arisen). APEEL believes that the Commonwealth should demonstrate leadership in relation to the design of EAA systems across Australia by incorporating reforms to its current system that address both these deficiencies.

With respect to the subject of **public participation**, the Panel notes that, with a few exceptions at the state level, this is generally confined to providing an opportunity for public comment on the draft EIS documentation. It has become common for such documentation to be voluminous whilst, at the same time, failing to selectively and adequately

¹⁵⁵ S Marsden, ‘SEA of Australian Offshore Oil and Gas Development: ESD or Deregulation’ (2016) 33 *Environmental and Planning Law Journal* 21, 30.

address the critical environmental issues raised by proposed projects. It is also doubtful whether comments provided by the public on a draft EIS have any particular influence or effect subsequently, when the assessment of the final EIS documentation is undertaken by the relevant government agency. The process is also vulnerable to bias in two respects: first, given that the proponent, usually relying on environmental consultants, is responsible for the preparation of the EIS documentation; and second, that government officers situated within environmental agencies that are answerable to their minister are responsible for the preparation of assessment reports and recommendations to the ultimate decision-maker (usually their minister).

APEEL believes that one means of countering these potential biases, whilst also affording a more constructive and genuine approach to public participation in the EAA process, is for an independent public inquiry to be conducted with respect to each project proposal that is made subject to a full EIS requirement. Such inquiries would be conducted by scientists with the appropriate expertise in relation to each particular proposal, to be identified from a pool of experts appointed for this purpose. The Panel notes that such an arrangement was established early in the operation of the *EPIP Act*, but was not continued after the first few years of operation of this Act and that whilst the *EPBC Act* also contains a provision for the conduct of public inquiries (s 107), this has essentially lain idle since the Act was passed.

APEEL recommends that a public inquiry be made a mandatory part of the EIA process whenever a full EIS is required by the Commonwealth, and for a pool of expert hearing Commissioners to be established from which a panel of three could be selected to conduct each inquiry. The role of the public inquiry would be twofold. First, it would afford interested and concerned parties within the community the opportunity to express their views and any concerns they may have with respect to the environmental and social impacts of the proposed activity. APEEL recognise that the complexities with respect to some scientific issues related to a project may mean that there is a need for communities to have access to their own, independent scientific advice and therefore support a scheme whereby access may be provided to such advice in order to assist interested parties to present submissions to a public inquiry.¹⁵⁶ Second, a public inquiry would enable a more targeted and detailed examination of the critical environmental issues raised by a project to be undertaken for the purpose of providing publicly available recommendations to the relevant decision-maker. This process would bring a greater degree of objectivity to the assessment process and help to counter the inherent biases mentioned above. It would also serve to focus attention on a decision-maker where the recommendations of an inquiry are not accepted, compelling some public justification for the final decision and therefore a higher level of political accountability.

Turning to the subject of **post-project monitoring**, this has been a widely neglected element of EAA systems in Australia, even though the risk-based methodology that underpins them is assumed to involve adaptive management techniques that allow for the revision of approval conditions where necessary (see the Panel's *The Foundations of Environmental Law: Goals, Objects, Principles and Norms* (Technical Paper 1, 2017) for a discussion of this topic). Without such monitoring, most projects proceed through construction and operation without any vigorous oversight to check that they are meeting the performance criteria established on the basis of their environmental assessment and reflected in the conditions attached to their approval. This is partly a compliance and enforcement issue related to whether actions required by such conditions have been undertaken by the proponent, but it is also, and more fundamentally, related to the question of the accuracy of the impact predictions presented in an EIS in the first place. There has been very little study of this subject in Australia since a project undertaken by Buckley over 25 years ago revealed that, at that time, impact predictions had an accuracy of less than 50%.¹⁵⁷ Likewise, evidence of EIA impact prediction accuracy is relatively scant overseas, but the few studies that have been undertaken have produced similar results.¹⁵⁸ This is a fundamental and serious area of concern with respect to the EIA process which requires greater attention.

APEEL recommends that monitoring and reporting of the environmental impacts of projects made subject to the Commonwealth EAA process should be a mandatory requirement, and that the Commonwealth legislation should

¹⁵⁶ See for an example of what was termed an 'intervenor funding' scheme in Ontario, Canada, *Intervenor Funding Act*, RSO 1990, cl-13 (which lapsed in 1996); for a discussion of this scheme, see D S McRobert, *Intervenor Funding for Public Participation in Federal Environmental Decision-making* (CreateSpace, 2012).

¹⁵⁷ R Buckley, 'Auditing the precision and accuracy of environmental impact predictions in Australia' (1991) 18 *Environmental Monitoring and Assessment* 1.

¹⁵⁸ For a review of this subject, see B Dipper, C Jones and C Wood, 'Monitoring and Post-Auditing in Environmental Impact Assessment: A Review' (1998) 41 *International Journal of Environmental Planning and Management* 731, 741 noting that the limited studies undertaken indicate that 'only a minority of EIA forecasts have proved accurate or almost accurate'.

provide also for an adaptive management approach whereby conditions attached to a project approval may be revised to address any unforeseen impacts that are disclosed by such monitoring and reporting. The Panel also believe it is desirable, at a more general level, for a new Commonwealth environmental institution (to be discussed below) to be charged with the task of performing an audit of previous Commonwealth-managed EISs to provide a contemporary evaluation of the reliability of the impact predictions made therein. This could provide a valuable insight into where particular types of impacts may need to be addressed differently in the course of granting project approvals, particularly in terms of the particular conditions attached to an approval.

RECOMMENDATION 2.13

That the next generation of Commonwealth environmental legislation, in providing for a Commonwealth environmental assessment and approval (EAA) process, should include provision for the following measures:

- (i) a mandatory requirement to conduct a public inquiry whenever a full environmental impact statement (EIS) is required by the Commonwealth, such inquiry to be conducted by a panel of hearing commissioners selected from a pool of scientific and other experts appointed for this purpose;*
 - (ii) for access to independent expertise to be provided to selected community representatives to assist them to present submissions to an EIS-related public inquiry;*
 - (iii) a mandatory requirement upon proponents to undertake monitoring and reporting of the environmental impacts of projects approved under the Commonwealth EAA process, together with an adaptive management approach whereby conditions attached to a project approval may be revised to address any unforeseen impacts that are disclosed by such monitoring and reporting; and*
 - (iv) an audit of previous Commonwealth-managed EISs be undertaken by a newly-established Commonwealth environmental institution to provide a contemporary evaluation of the reliability of the impact predictions made therein (see also Recommendation 2.14(ii)).*
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3. Commonwealth environmental institutions

In advancing ideas for a redesigned system of environmental federalism in Australia, the Panel is very conscious of the questions that inevitably will arise concerning how such a system would be administered and resourced. In particular, the Panel see a need to establish a new Commonwealth institution to oversee the development and implementation of Commonwealth strategic environmental instruments, but also recognise that other institutional reforms at the Commonwealth level may be desirable. The Panel appreciate also that funds will be required for the operation of any new Commonwealth environmental institution and that additional amounts will be required for the purposes of the financial assistance schemes that would support state implementation of Commonwealth strategic environmental instruments. These matters are addressed in the final two sections of this paper, looking firstly, in this section, at the need for a new environmental institution or institutions to be established by the Commonwealth, then examining the subject of revenue-raising.

3.1 Overview of current institutional arrangements

Given that there are over 70 Commonwealth Acts that relate to some aspect of environmental management (see Appendix 1 to this paper), and that most of these establish one or more institutions for the purposes of their administration, there is inevitably a plethora of Commonwealth agencies, authorities, boards and committees performing various functions alongside and in addition to the Minister and Department of Environment and Energy. In 2014, the Commonwealth National Commission of Audit, in a report on Commonwealth infrastructure and public service performance and accountability,¹⁵⁹ presented a list of Commonwealth bodies in Annex B to its report which identified 194 ‘principal’ bodies and a staggering 696 ‘non-principal’ bodies. Whilst now slightly dated, this list is instructive in terms of providing some insight with respect to the wide range of environment-related institutions that have been established by the Commonwealth.

This paper has drawn on the National Commission of Audit report to produce a list of the ‘principal’ Commonwealth bodies that have an environment-related function (see Table 1 below). Table 1 does not include a much larger list of additional bodies classified as ‘non-principal bodies’, though this classification at times appears to have been applied somewhat arbitrarily by the Commission.

¹⁵⁹ National Commission of Audit, *Towards Responsible Government: The Report of the National Commission of Audit – Phase Two* <<http://www.ncoa.gov.au/report/phase-two/index.html>>.

Table 1: List of ‘principal’ Commonwealth bodies (per the National Commission of Audit, 2014)

Australian Pesticides and Veterinary Medicines Authority
 Department of the Environment
 Clean Energy Regulator
 Climate Change Authority
 National Environment Protection Council Service Corporation
 Director of National Parks
 Great Barrier Reef Marine Park Authority
 Murray-Darling Basin Authority
 National Water Commission (since abolished)
 Australian Radiation Protection & Nuclear Safety Authority
 Food Standards Australia New Zealand
 Australian Renewable Energy Agency
 National Offshore Petroleum Safety & Environmental Management Authority
 Clean Energy Finance Corporation

There are many other significant Commonwealth bodies not included in Table 1 that perform important administrative functions in relation to the environment, but the overall situation is one of great complexity and diversity. Those described here is what is considered to be some of the key components of this complex administrative structure.

At the present time, the Commonwealth performs various environment-related functions through the Department of the Environment and Energy and various statutory authorities such as the Great Barrier Reef Marine Park Authority and the Murray-Darling Authority, the Climate Change Authority and the Clean Energy Regulator. It also has established a number of authorities under cooperative schemes with the states which perform a range of risk assessment functions.¹⁶⁰ There has never been established a Commonwealth environment protection authority of a similar nature to the US Environmental Protection Agency¹⁶¹ and, instead, the primary vehicle for Commonwealth involvement in environmental matters has been a Department that answers to its relevant Minister. This Department has taken many different names and forms over the past 40 plus years and presently operates, as noted above, as the Department of Environment and Energy (since July 2016).

The Department of Environment and Energy (the Department) manages a wide range of programs that are underpinned by about to Commonwealth environment-related Acts. These include environmental protection (which incorporates the *EPBC Act*’s EAA process), a clean environment, national parks and marine matters, biodiversity conservation, national heritage, climate change and energy, and a science and research arm.¹⁶² Whilst this appears at face value to be an extensive portfolio, it must be remembered, and as pointed out above, that Commonwealth regulatory powers are generally limited to Commonwealth actions and activities on areas under Commonwealth control and, in some cases, functions that it has agreed with the states to perform. The Department is, of course, always subject to the direction of the incumbent Minister for the Environment. Moreover, although the Department can always seek expert advice, it is basically an administrative body whose senior officers are usually chosen for their experienced as administrators rather than any specialist expertise in the relevant sciences.

¹⁶⁰ These include, apart from several such bodies included in the Table 1 above, the National Industrial Chemicals Notification and Assessment Scheme (NICNAS), the Office of the Gene Technology Regulator (OGTR), the National Regulatory Authority for Agricultural and Veterinary Chemicals (AGVET) and the Department of Health Therapeutic Goods Administration.

¹⁶¹ Note that a proposal to this effect by PM Hawke in 1990 was quickly dismissed through the subsequent Closer Partnership Initiative and the 1992 COAG *IGAE* signed off by his successor, PM Paul Keating.

¹⁶² See Department of Environment and Energy (Cth), *Topics* (2017) Department of the Environment and Energy <<https://www.environment.gov.au/topics>>.

3.2 Analysis

APEEL believe that there are two broad questions to be addressed concerning the shape of future Commonwealth institutional arrangements for the environment, especially in light of the recommendations for the redesign of the current environmental federalism model that is presented in this paper. The first question is whether a new institution should be established that would assume responsibility for the operation of the system of Commonwealth strategic environmental instruments that this paper has proposed.¹⁶³ This in turn appears to require consideration of whether there should be a clear separation between **strategic** and **regulatory** functions when designing the Commonwealth's institutional arrangements regarding the environment.

The second question involves the choice between vesting responsibility for various administrative functions (both strategic and regulatory) within a statutory authority or, alternatively, continuing with the current arrangements (as largely reflected in the *EPBC Act*) that place most responsibility with the Environment Minister and the Department. An ancillary question in this context is the extent to which any statutory authority that may be established should enjoy independence from Ministerial direction in performing its functions. These are general design questions that is necessary to address before considering specific options with respect to new Commonwealth institutional arrangements for the environment.

3.2.1 The need for a new Commonwealth institution regarding strategic environmental instruments

The question to be addressed here is where responsibility should rest within the Commonwealth for the development of the various types of strategic environmental instruments recommended in this paper and for the performance of some other functions identified for the Commonwealth in the other APEEL *Technical Papers*. In particular, should there be a separate institution that has essentially a high-level, strategically-focussed mission and which sits apart from other administrative structures of the Commonwealth established to perform environment-related functions?

APEEL is of the view that it is desirable to establish a separate institution with a predominantly strategic policy focus. This conclusion is supported by the findings of the Productivity Commission, in its report on major project development assessment processes in 2013, which recommended as follows:

'The Commission proposes that jurisdictions pursue the institutional separation of their environmental assessment and enforcement functions from their environmental policy functions'.¹⁶⁴

However, the Panel recognise that there is a further question, as noted above, as to whether this proposed new scheme should be administered by a new statutory authority or by the Minister and the Department. Given the scheme involves extensive consultation and negotiation with state governments, it may be argued that the political diplomacy required is best undertaken via a Minister with the support of Departmental officials, rather than by an independent statutory authority. On the other hand, it can be argued that the most effective implementation of the scheme would be likely to be achieved through having it administered by an independent, expert institution that is, and is perceived to be, free of political or other influence. On balance, the Panel supports this latter argument and therefore favour the establishment of a new statutory institution to drive the strategic leadership role that this paper recommends the Commonwealth should assume in the future.¹⁶⁵

¹⁶³ With respect to the first question, APEEL believe that there are additional functions that are not currently being performed by the Commonwealth, but which are recommended here and in other *Technical Papers* should be taken up by it, which also could be assigned to the institution responsible for oversight of Commonwealth strategic environmental measures (see further below).

¹⁶⁴ Productivity Commission, 'Major Project Development Assessment Processes' (Research Report, Productivity Commission, 2013) 19 <<http://www.pc.gov.au/inquiries/completed/major-projects/report>>.

¹⁶⁵ APEEL accept, however, that the appropriation of Commonwealth funds for the purpose of establishing direct financial assistance schemes linked to the implementation of Commonwealth strategic environmental instruments is inescapably a function of the government of the day, with the relevant institution being left to administer whatever funds are allocated by this means. This paper sets out, below, proposals for the establishment by the Commonwealth of a special account, the income from which can be applied by the proposed statutory authority for such purposes.

3.2.2 The need for a new Commonwealth institution for environmental regulation

APEEL believe it is necessary to consider the need, alongside a new, strategically-focused Commonwealth environmental institution, for a separate and additional Commonwealth environmental regulatory authority. In the review of the practical dimension of environmental federalism above, this paper notes the wide array of Commonwealth environmental legislation and supporting administrative arrangements and recommends a review of these for the purpose of determining where there may be opportunities to consolidate some functions in a new Commonwealth regulatory institution (see Recommendation 2.11). As discussed immediately above, any such institution should be distinct from one which is responsible for strategic and policy-related functions. The question that arises once more, however, is whether a separate statutory authority is preferable to having regulatory functions exercised through a Minister and a supporting Department.

At the State level, environmental protection regulatory functions are generally exercised by statutory environmental protection authorities that enjoy a reasonable degree of independence from ministerial direction with respect to the routine performance of such functions (including licensing, issuing of orders and other enforcement action). On the other hand, in relation to land-use planning and the assessment and approval of major projects, state governments generally have favoured vesting responsibility for administration of the relevant process in a department and for the approval of projects in a minister. The same arrangements currently apply with respect to EAA at the Commonwealth level under the *EPBC Act*. When it considered these arrangements, the Productivity Commission produced something in the nature of an each-way bet. First, it expressed support for the general approach of placing regulatory responsibilities in an independent authority:

‘Good regulatory practices can only go so far in promoting certainty and transparency. Changes to regulatory governance and institutional arrangements also have a role to play. In particular, public confidence, competitive neutrality and impartiality are more likely to be established through independent regulatory agencies. This is one of the lessons from jurisdictions that have already established such agencies’.¹⁶⁶

However, when it came to applying this principle to environmental approvals under an EAA system, it favoured leaving responsibility for environmental approvals with the relevant Minister:

‘The least-cost institutional form should be determined by each jurisdiction having regard to existing structures. This institutional separation should not alter the authority of the relevant Minister to make primary environmental approval decisions. For the Australian Government, this means transferring the assessment and enforcement functions required by the *EPBC Act* from the Department of the Environment to a new independent agency’.¹⁶⁷

Thus, whilst the Commission supported the vesting of assessment and enforcement functions in an independent authority, it stopped short of supporting the same approach with respect to the exercise of approval powers, suggesting that these should remain in the hands of the Minister. APEEL is strongly supportive of the general principle espoused by the Commission and therefore support the establishment of a separate Commonwealth institution that would be responsible for the performance of a wide array of environmental regulatory functions that are currently exercised by various different bodies. Whether this jurisdiction should extend to the granting of environmental approvals where the Commonwealth’s EAA process has been triggered is clearly a matter upon which opinions may vary, but the Panel see no reason in principle to exclude this particular function from the general scheme involving an independent environmental regulatory body. This matter is discussed further below.

With these considerations in mind, this paper will address in the next section some specific proposals for the establishment of several new Commonwealth environmental institutions.

¹⁶⁶ Productivity Commission, above n 164, 18–19.

¹⁶⁷ Ibid 19.

3.3 Options for reform

3.3.1 A Commonwealth Environmental Commission (CEC)

This paper recommends that the Commonwealth should establish a statutory body that will have jurisdiction for the new range of Commonwealth strategic functions as proposed. In particular, the Panel consider as appropriate an environmental counterpart to the economic strategy role of the Reserve Bank of Australia and that this new institution might be called the **Commonwealth Environmental Commission (CEC)**. Following the Reserve Bank model, the membership of this Commission might include some ex officio members, such as the Secretary of the Department of the Environment and Energy and the CEO of the Commission, but the bulk of the members would be appointed for a term of years by the Governor General on the advice of the government of the day. It is anticipated that, as with the Reserve Bank, such an appointment would be seen as a prestigious and important one, offering an opportunity for national service at the highest level.¹⁶⁸

The Panel envisage four broad types of responsibilities being vested in this Commission. First, a very significant and substantial range of tasks will be involved in relation to the proposed system of Commonwealth strategic environmental instruments, including the development and adoption of such instruments and the approval of state and Commonwealth implementation plans with respect to each instrument.¹⁶⁹ In addition, there will be a need to administer financial assistance programs that are designed to support the various instruments and their related implementation plans.¹⁷⁰ It will be necessary also to monitor the implementation of Commonwealth instruments through their related implementation plans and to determine whether to trigger the pre-emption of state assessment and approval laws in the event of non-cooperation by a state with respect to a particular instrument.¹⁷¹

Second, as proposed in Australian Panel of Experts on Environmental Law, *Terrestrial Biodiversity Conservation and Natural Resources Management Governance* (Technical Paper 3, 2017), there is a range of tasks relating to environmental data collection, monitoring, evaluation and reporting (including state of the environment reporting) that need to be pursued by the Commonwealth, in collaboration with the states. This paper notes above (and also in Technical Paper 3) the serious deficiencies that exist at present in Australia with respect to the availability of environmental data and suggested that there is a compelling need for better monitoring, evaluation and reporting with respect to the state of the environment. This paper has also recommended the development of a Commonwealth environment protection measure in the form of a protocol that would provide for a nationally consistent approach to data collection, evaluation and reporting, including through the development of national indicators. The Panel believe that the CEC should be responsible for driving these activities on a national scale, including through the development of appropriate protocols.

Third, as suggested in Australian Panel of Experts on Environmental Law, *The Foundations for Environmental Law: Goals, Objects, Principles and Norms* (Technical Paper 1, 2017), there is a need to develop sustainability indicators and to report on progress against these indicators. These particular functions should be seen as complementary to the environmental monitoring and related tasks just referred to.

Fourth, there would be considerable benefits in reviving the role of the former Resources Assessment Commission (which is briefly outlined above) in undertaking broad-level, strategic inquiries into particular environmental issues or challenges and providing advice to the Commonwealth government on the basis of such inquiries. This investigative

¹⁶⁸ APEEL envisage that appointees to the Commission would be chosen by reason of their personal qualities, not as a representative of any organisation or government, and that, between them, members would bring to the Commission a wide range of expertise and experience about the tasks it will be required to perform. Of course, this expertise could not cover all the relevant tasks and issues to be addressed by the Commission (many of them highly specialised), but these gaps could be filled by staff or consultants. As with the Reserve Bank, the Panel believe the Commission would be seen as a most desirable place to work, enabling it to attract top quality scientists and other professionals.

¹⁶⁹ Note, however, that this paper has countenanced the option of allowing the Minister the power to disallow strategic environmental instruments on public interest grounds, and also suggested that such instruments should be subject to review by the Commonwealth Parliament; thus, the power of the Commission to approve these instruments is of a qualified nature.

¹⁷⁰ As noted above, this paper recognises that the appropriation of funds to support such schemes is inevitably a responsibility of the Commonwealth more generally and that the Commission will be required to work with whatever resources are made available to it for this purpose; see further below, the recommendations for how adequate resources might be generated.

¹⁷¹ Once again, this power would be of a qualified nature, insofar as this paper has suggested that the means by which pre-emption would be implemented would be through the adoption of regulations made under the parent Act that provides more generally for the system of Commonwealth strategic environmental instruments.

role could be activated by the Commission itself, or at the request of the Commonwealth Environment Minister. The findings arising from such inquiries could also lead to the identification of topics upon which the Commission might consider the adoption of new strategic environmental instruments.

In addition to the four types of functions outlined above, the Panel envisage that the Commission would be available to advise the government of the day about policy issues that may arise out of the Commission's published information, or independently thereof.

Taken together, this constitutes a substantial array of essentially new functions that are not being performed by existing Commonwealth environmental institutions. It is the Panel's view is that it is highly desirable to separate these strategic, monitoring and evaluative functions from those of an essentially regulatory nature that are being performed currently by the Commonwealth through its existing administrative institutions. This paper has noted above that this separation would assist the proposed CEC to also oversee the performance of the Commonwealth agency charged with the responsibility for environmental regulation in relation to its implementation of such instruments. More generally, there are considerable advantages in separating these inter-related tasks from those of a more conventional, regulatory nature by vesting them in a high-level Commonwealth Commission. This would enable a well-coordinated approach at a strategic level, backed by the gathering and analysis of essential data, which could serve to inform and guide the form and content of regulatory and other arrangements.

Turning to the question of the degree of independence that the proposed Commission should enjoy, the Panel's view is that it should be free from Ministerial direction in relation to the performance of the functions outlined above. There is no novelty about this suggestion. There are already statutory authorities, both Commonwealth and state, which have a degree of guaranteed independence in their decision-making. For example, in the Commonwealth sphere:

- although the *Reserve Bank Act 1959* does not expressly make the Board independent of the Treasurer in its decision-making, it implies this by making provision (s 11) for a formal mechanism to settle policy differences between the Board and the government;
- section 8(4) of the *Auditor General Act 1997* provides that, subject to the Act and other Commonwealth laws, 'the Auditor General has complete discretion in the performance of his or her functions or powers'.

APEEL believe that the functions of the Commonwealth Environmental Commission outlined above are similarly high level in nature to those exercised by the Reserve Bank and the Auditor-General and that therefore an equivalent level of independence is appropriate for the Commission. If the Commission has a general advisory role to the government alongside its specific functions, it would be essential for it to be seen as independent of government, by conveying its advice openly, for example, in a document that the Environment Minister would be obliged to lay before the Federal Parliament.

The cost to the Commonwealth budget of an Environment Commission would depend upon the scale of its activities and the extent of any alternative revenue sources that might be identified by the government of the day. It is not possible here to estimate exactly what might be that cost, but can note, by way of rough comparison, that the General Administrative Expenses for the Reserve Bank of Australia in 2014-15 totalled \$340 million, after deducting \$28 million spent on materials used in its note and security products.¹⁷² Whilst this might be regarded as a significant sum, it is less than 1% of the 2015-16 Estimated General Government Expenses.¹⁷³

In the final analysis, the question is how much is Australia willing to pay to protect its natural assets? In this final section, the paper considers a range of options for raising the revenue required not only to support the operations of the proposed Environment Commission, but also the various financial assistance schemes which is recommended the Commonwealth develop as a means of inducing state cooperation with respect to the implementation of national strategic environmental instruments.

Finally, with respect to the location of the proposed Commonwealth Environmental Commission, it is possible some

¹⁷² See Reserve Bank of Australia, *Annual Report* (2015–16) <<http://www.rba.gov.au/publications/annual-reports/rba/2016/>>.

¹⁷³ See Australian Government, Budget Report No. 1, Statement 5, available at <http://www.budget.gov.au/2016-17/content/bp1/html/bp1_bs5-01.htm>.

might fear that it would become just another bureaucracy, staffed by people resident in Canberra and ignorant of the places with which they have to deal, however this need not be so. The Commission's head office might be located in Canberra or it might not. The Reserve Bank is headquartered in Sydney, but also operates offices in several cities. Wherever the head office of the Environment Commission is situated, it would be possible, and indeed desirable, for the bulk of the staff to be located in selected centres throughout the country, perhaps chiefly in the various state capitals, but also in some major regional centres. As noted above, the United States' Environmental Protection Agency has a number of regional offices that are located outside Washington DC and whose staff are aware of, and sensitive to, the concerns and aspirations of the governments and communities within their region. A similar approach as highly desirable with respect to the CEC.

3.3.2 A Commonwealth Environment Protection Authority

Even with the establishment of a CEC, there will remain a range of other Commonwealth institutions that are responsible for performing various regulatory tasks that are assigned under existing Commonwealth environmental legislation. As recommended above, a review of existing Commonwealth regulatory functions and administrative arrangements could reveal opportunities to establish a more coordinated and efficient institutional structure than exists at present by consolidating various authorities. It is therefore recommended that, following a review of existing institutions and legislation, there should be established a **Commonwealth Environment Protection Authority** that would have primary responsibility for the exercise of Commonwealth environmental regulatory functions.

With respect to the regulatory functions that are currently exercised by the Commonwealth through the Environment Minister and the Department (including with respect to the EAA process under the *EPBC Act*), there is good reason to consider the consolidation of many of these functions in the proposed Commonwealth Environmental Protection Authority. To what extent this would involve the transfer of decision-making responsibilities from the Minister to this Authority would require further, detailed consideration, but, as a general principle, it is better for routine regulatory functions to be performed by an independent authority rather than by a Minister. In the case of the Commonwealth EAA process, the Panel believe that both public and industry confidence in this process would be enhanced by such an approach and that, at the very least, all decisions prior to the ultimate approval of a proposal should be handled by the proposed Authority rather than the Minister. Whether this final decision should also be made by the proposed Authority is a matter upon which opinions may well differ, and which it may be difficult to persuade any government to accept, but in principle APEEL support this approach.

Turning to the question of the level of independence from political direction to be accorded to the proposed Authority, it is suggested that similar considerations apply to those already canvassed above in relation to the proposed CEC. In particular, routine regulatory functions should be able to be performed by the authority free from any form of ministerial oversight or direction.¹⁷⁴

A significant aspect of the proposed Authority's regulatory role must be to ensure compliance and, where necessary, effective enforcement of the relevant Commonwealth environmental legislation. This will extend to the enforcement of conditions attached to any approvals issued by the Commission. Section 142 of the *EPBC Act* provides a financial civil penalty for any person (individual or corporation) whose taking of an action has been approved under Part 9 of the Act and who contravenes any condition attached to that approval. Sections 142A and 142B create criminal offences applicable to such persons if, by act or omission, they breach a condition. It is recommended that these three sections are worth keeping, but note that they are of limited value insofar as they apply only to the person to whom the approval was granted.¹⁷⁵

¹⁷⁴ APEEL acknowledge, however, that no statutory authority can be completely independent. It will usually be appropriate for appointments to be made by, or on the recommendation of, the government. Even if the authority has the benefit of a 'one-line' appropriation in the Commonwealth Budget, issues will necessarily arise in relation to the size of that appropriation. Tied up with this question is the Authority's staffing levels and, therefore, its capacity to perform its functions. Inevitably, these must be matters for discussion on a recurring basis and ultimately, the government's view will, and should, prevail.

¹⁷⁵ Typically, that person will be a corporation, in which case only a pecuniary penalty can be imposed. Any individual who was involved in the breach, no matter how intimately, but is not himself/herself the applicant for approval, cannot be prosecuted under any of these sections.

Second, and perhaps more importantly, none of these sections enable the Commonwealth to obtain rectification of any breach of a condition. It is recommended that one of the functions of a Commonwealth Environment Protection Authority ought to provide for the civil enforcement of conditions imposed under the Authority's approvals, usually by seeking a Federal Court injunction. Injunctive relief is a salutary remedy. The court could make orders, not only against a corporate applicant for approval, but also against individuals knowingly involved in the breach (such as officers of the corporation), requiring specified defendants to carry out particular remedial action, so long as that action is needed to remedy the applicant's act or omission. Failure to comply with the court's order constitutes a contempt of court and is punishable, if necessary (which it rarely is), by imprisonment.

As to the sources of revenue for this Authority, the Panel does not assume that all its funding would need to come from Commonwealth general revenue. There may be some scope for a 'user pays' approach. For example, the South Australian Environmental Protection Authority derives a significant portion of its budget from levies paid by users of the State's waste disposal system. Depending on the attitude of the government of the day, there may well be an opportunity for the Authority to earn at least a portion of its income from fees or levies related to its regulatory work.

3.3.3 A Commonwealth Environmental Auditor

As noted in the penultimate recommendation of Technical Paper 3, and as is also discussed in Technical Paper 8, 2017, the Panel believes there is a need for new integrity safeguards to be adopted and applied for the purpose of ensuring effective performance of environmental responsibilities by government authorities. This additional function requires some further explanation.

Australia, like most countries, has a long record of creating laws and other environmental governance interventions that have proved to be ineffective in practice. The achievement of continuing improvement requires objective review and transparent reporting of the performance of the environmental governance system. At present, there is no mechanism for carrying out integrity checking and reporting to the Australian public about the performance of environmental governance.¹⁷⁶

The establishment of such a mechanism would enable the consideration of both the positive and negative impacts of legal and policy measures on economic, social and environmental systems (paying particular attention to interests that are already marginalised). Completing such rigorous assessments could also serve as an important transparency tool by increasing knowledge about decisions being made, as well as promoting debates about the substantive issues in relation to implementation.¹⁷⁷ Ultimately, this mechanism could lay the grounds for an ongoing cycle of monitoring, feedback and review focused on continuous improvement (see Technical Paper 1) and reflected, amongst other means, in the development of new or revised strategic environmental instruments. This adaptive cycle could aspire to a continual flow of information, learning and improvement regarding implementation.¹⁷⁸

APEEL is of the opinion that these integrity checking and reporting functions might best be performed by establishing an independent office of **Commonwealth Environmental Auditor** whose oversight role would extend to the operations of the proposed Commonwealth Environment Protection Authority, as well as any other Commonwealth bodies in terms of their performance of environmental responsibilities. As outlined above, this office also may be able to perform a role with respect to the provision of advice to the proposed CEC concerning the need to develop specific strategic environmental instruments.¹⁷⁹

¹⁷⁶ This can be contrasted with the role of the Productivity Commission and the Australian Competition and Consumer Commission, each of which provide strong ongoing supervision of the integrity of markets and the economic efficiency of government operations.

¹⁷⁷ P Martin et al., *Developing a Good Regulatory Practice Model for Environmental Regulations Impacting on Farmers* (2007) Australian Farm Institute <<http://www.farminstitute.org.au/publications-1/research-reports/developing-a-good-regulatory-practice-model-for-environmental-regulations-impacting-on-farmers>>.

¹⁷⁸ M C Dorf and C F Sabel, 'A Constitution of Democratic Experimentalism' (1998) 98 *Columbia Law Review* 267.

¹⁷⁹ Note that in Australian Panel of Experts in Environmental Law, *Democracy and the Environment* (Technical Paper 8, 2017), where the subject of integrity safeguards is also addressed, alternative institutional options are canvassed, including a National Integrity Commission that presumably would have a brief that extends beyond environmental matters, and also a National Environmental Commission. The idea of a Commonwealth Environmental Auditor is proposed on the assumption that the broader concept of a National Integrity Commission may not be adopted; the Panel also see an advantage in the proposed office being separate from the Commonwealth Environment Commission, to whom it is suggested it may render advice in some circumstances.

RECOMMENDATION 2.14

To ensure the effective implementation of the next generation of Commonwealth environmental laws, the Commonwealth should establish one or more new statutory authorities to perform functions that will complement, replace and expand upon the functions currently exercised by the Minister and Department for Environment and Energy and other existing Commonwealth statutory environmental authorities, with the following possibilities in mind:

- (i) a high-level (cf. Reserve Bank) **Commonwealth Environment Commission (CEC)** that would be responsible for: (a) administration of the system of Commonwealth strategic environmental instruments (see Recommendations 2.3-9); (b) a nationally coordinated system of environmental data collection, monitoring, auditing and reporting (including with respect to environmental sustainability indicators and trends); (c) the conduct of environmental inquiries of a strategic nature (akin to those conducted by the former Resources Assessment Commission); and (d) the provision of strategic advice to the Commonwealth government on environmental matters, either upon request or at its own initiative;*
 - (ii) a **Commonwealth Environment Protection Authority (CEPA)** that would be responsible for: (a) administration of the Commonwealth's environmental assessment and approval system, including where conditional pre-emption of equivalent state legislation has occurred (see Recommendation 2.8); (b) the regulation of activities undertaken by Commonwealth authorities or by other parties on Commonwealth land; (c) the auditing of Commonwealth-required EISs (see Recommendation 2.13(iv)); and (d) any other environmental regulatory functions that may be appropriately assigned to the authority (see Recommendations 2.2 and 2.11); and*
 - (iii) a **Commonwealth Environmental Auditor** that would be responsible for: (a) monitoring and reporting on the performance of CEPA, the Minister and Department for Environment and Energy and other Commonwealth bodies in relation to their performance of their statutory environmental responsibilities; and (b) providing recommendations to the Commonwealth Environment Commission on the need to develop new strategic environmental instruments (see Recommendation 2.9(i)).*
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4. Ensuring adequate resources to support effective environmental governance

This final section of the paper provides some analysis concerning how to resource the extensive recommendations contained in this and other *Technical Papers* produced by the Panel. In so doing, it is recognised that the availability of funds and other resources to implement these recommendations, and to contribute to sound environmental governance, is only one of a much broader range of factors that can influence the contribution of the next generation of environmental laws to achieve sound environmental outcomes. These include the nature of the environmental challenges that are to be faced, the quality of the strategies adopted to implement laws (which is addressed at length above) and the degree to which industry, citizens and government are committed to achieving sound environmental outcomes.¹⁸⁰ A full exploration of all these matters is outside the scope of this report, but it is important to the credibility of the recommendations advanced by the Panel in this and other *Technical Papers* to provide some preliminary ideas concerning the question of how to generate the resources required for their implementation.

Australian Panel of Experts on Environmental Law, Terrestrial Biodiversity Conservation and Natural Resources Management Governance (Technical Paper 3, 2017) and Marine and Coastal Issues (Technical Paper 4, 2017) both discuss this resources challenge and refer to some of the prior studies that have considered these issues for Australia. Many different approaches are already in use, whilst others have been proposed but not yet fully tested, to access resources for the environment. This paper begins by suggesting that **unpaid action or investment by citizens** is pivotal, and that this is already occurring in many ways, including:

- using private resources to support the environment, for example, by protecting native habitat areas on private land or adopting purchasing and consumption patterns to be environmentally responsible or to provide a market signal to businesses;
- engaging in voluntary environmental work, such as conservation management on farms that is not required for production or by the law, or participation in the very many active community groups;
- environmental philanthropy, which is being used increasingly for biodiversity protection projects in Australia;¹⁸¹
- crowd-funding, which is being used for small projects (for example, Pozible Landcare & Environment Collection);¹⁸² and
- consumer or political action that increases support for the environment and responsible stewardship.

Industry too can be an important source of resources for the environment, whether by adopting environmental restraint and investing in systems of production and commerce that support sustainability, or by:

- environmental entrepreneurship, for example, by marketing low environmental impact products or services;
- adopting responsible production and market place standards, such as industry environmental codes of conduct, voluntary production standards and environmental branding;
- direct investment, such as through corporate philanthropy and social responsibility funds; and
- formation of, and participation in, markets that support the environment, such as participating in environmental services markets.

¹⁸⁰ See R N Stavins, 'Introduction to the Political Economy of Environmental Regulations' (Discussion Paper, Resources for the Future, Washington DC, 2014); D E James, 'Environmental Incentives: Australian Experience with Economic Instruments for Environmental Management' (Consultancy Report, Community Information Unit, Department of the Environment, Sport and Territories, 1997). For effectiveness evaluations of the Precautionary and Participatory Principles, including in Australia, see P Martin and J Williams, 'Next Generation Rural Natural Resource Governance: a Careful Diagnosis' in V Mauerhofer (ed), *Legal Aspects of Sustainable Development: Horizontal and Sectorial Policy Issues* (Springer Publishers, 2015).

¹⁸¹ See for example, The Nature Conservancy Australia, *Nature Conservancy* (2017) <<http://www.natureaustralia.org.au>>.

¹⁸² See Pozible, *Landcare and Environment Collection* (2017) <<http://www.pozible.com/collection/detail/109>>.

As detailed in Technical Paper 3, **government investment** serves many purposes, including as a catalyst and supporter for citizen and industry action, but also by:

- providing infrastructure for environmental initiatives, such as water markets and regional natural resource management programs;
- through policy and regulation, underpinning the social norms that are essential to good governance; and
- investment in research and development, and the dissemination of knowledge, to strengthen the national ability to act as more effective environmental stewards.

There is an argument for equating government investment in the protection of the national assets to at least the same level as the target of 2% of the gross domestic product (GDP) that has been adopted for military spending in this country for some years. Such a level of commitment of public funds would of itself radically alter the capacity of both the Commonwealth and state governments to effectively manage Australia's natural resources and would have flow-on effects into regional and local levels of government also.

APEEL is of the opinion that the fundamental problem with respect to resourcing environmental management in Australia is the lack of an institutional framework to focus the potential sources of funding and other resources into a coherent, comprehensive investment program for the environment. Such a program could support the operation of the various Commonwealth institutions proposed above and also provide much-needed financial assistance to the states to enable them to effectively implement Commonwealth environmental strategies, however fundamental challenges exist in establishing such a program.

For large areas of Australia, there is probably insufficient economic activity to fund effective long-term stewardship from within the specific regions. There are also many people with land stewardship obligations who lack the economic or other capacity to do what is expected of them. The capacity of Aboriginal Australians to invest sufficiently to protect and restore the large areas where they now have legal custodianship is likely to be a continuing social and environmental concern for all Australians, given the entrenched social disadvantage under which many of these land stewards labour. Where there is sufficient economic intensity, such as in urban, industrial or mining areas, the incentives and institutional mechanisms for directing resources into environmental stewardship are not sufficiently effective. Government funding is unlikely to be sufficient by itself to overcome these challenges.

Significant innovation is needed to reduce the resulting investment gap for the environment. This will require a powerful institutional framework, so that the complex issues can be understood and strategies developed and implemented to reduce the environmental funding gap. For this reason the Panel propose the establishment of an **Environmental Investment Commission**, with a limited term, for the purposes of developing an investment strategy for the Australian environment.¹⁸³ For the purpose of debate this paper suggests the following:

- the Commission would be constituted by representatives of industry, civil society, and government. Ideally it would have high-level commercial, as well as policy and economic, skills;
- the Commission would have the brief of developing a national strategy through deep cross-sectoral engagement, including negotiation with key stakeholders to develop specific investment strategies and investment products;
- the Commission would be responsible for developing proposals to address fundamental challenges to effective investment, including strategies to reduce the transaction cost of market and market-like instruments (and other programs) which limit their effectiveness and attractiveness, and providing a viable framework of incentives for private investment (including taxation reform and efficient investment structures); and
- the Commission would also consider the most appropriate role for public funding and other public interventions to support a more effective investment climate for the environment. This may include consideration of hypothecated environmental funding, which could ensure more reliable programmatic support for long-term strategies (for further details in this regard, see Technical Paper 3).

¹⁸³ See P Martin and K Werren, 'An industry plan for the Victorian environment?' (Discussion Paper, Department of Sustainability and Environment, Victoria, 2009) (referred to there as an 'Industry Plan for the Environment').

Arising out of the efforts of the Commission over its specified life-span, would be the establishment of an **Environmental Futures Fund** that would constitute a special financial account of the Commonwealth. The income from this Fund could be used by the proposed CEC to support the implementation of Commonwealth strategic environmental instruments through financial grants to the states. By way of comparison, this paper notes the structure and functions of the Clean Energy Finance Corporation (CEFC) established in 2012 by the *Clean Energy Finance Corporation Act 2012 (Cth)*, which has access to an annual appropriation of \$2 billion for five years to 2017 that is paid into a CEFC special Account, with a targeted total amount of \$10 billion. An Environmental Futures Fund could be established and funded by similar means, with additional funding hopefully becoming available through the efforts of the proposed Environmental Investment Commission.

RECOMMENDATION 2.15

*That the Commonwealth establish a **Commonwealth Environmental Investment Commission** that would be responsible for addressing fundamental challenges to the effective resourcing of environmental management in Australia by identifying strategies to generate increased private and public sector funding and to maximise community investment and by also establishing an **Environment Future Fund**.*

5. Conclusions

Whilst the title of this *Technical Paper* is 'Environmental Governance', its focus is primarily on the environmental federalism system. The paper argues for a fundamental change to this system to enable the Commonwealth to perform a strong national leadership role of a strategic nature in relation to environmental matters under the next generation of Commonwealth environmental laws. It has done so because APEEL believe this will lead to better and more dynamic outcomes than have been achieved to date under the current system of environmental federalism. In presenting the proposals for a new strategic role for the Commonwealth, the paper has also emphasised that these do not involve a major transfer of regulatory functions from the states to the Commonwealth and should not stifle innovative actions on the environment at the state, regional and local levels.

In urging this substantial reform, this paper has sought to demonstrate that there is ample constitutional authority for the performance of a strong, strategic role by the Commonwealth. This paper has also argued that long-standing political bargains which have resulted in the current, highly de-centralised system should be abandoned. In their place is proposed a system in which a CEC would be responsible for the development of strategic environmental instruments of both a national and regional character and for supervising the implementation of these instruments by both state governments and Commonwealth agencies.

To ensure effective implementation of these instruments at the state level, this paper has suggested the use of two mechanisms: first, the provision of grants to the states to assist their implementation of specific instruments; and second, the use of conditional pre-emption to allow for certain Commonwealth environmental laws to over-ride corresponding state laws on the same subject-matter where states have not acted to implement particular strategic environmental instruments.

Alongside the federalism-related reforms proposed in this paper, it has canvassed the possibilities with respect to the establishment of several new Commonwealth environmental institutions. These include a high-level CEC to administer the proposed system of Commonwealth strategic environmental instruments; a Commonwealth Environmental Protection Authority to perform a wide range of regulatory functions, including administration of the Commonwealth's EAA measures; and a Commonwealth Environmental Auditor, to provide an integrity and accountability mechanism.

Finally, this paper has also canvassed in a preliminary manner the wide range of possibilities that might be considered for the purpose of resourcing environmental management in this country, including the many reforms advocated both in this paper and the other APEEL *Technical Papers*. This paper has proposed the idea of creating a limited-term Commonwealth Environmental Investment Commission to identify strategies to generate the funds to be allocated to a special purpose Environmental Futures Fund.

APEEL acknowledges that this paper is lengthier than the other *Technical Papers*. Given the fundamental nature of the environmental governance reforms proposed in this paper, it is necessary to provide a thorough justification for its proposals and also to outline the legal mechanisms involved in some detail. In the accompanying *Background Paper*, the Panel has gone further by presenting a comparison with the systems adopted in a number of other countries that also have a federal constitutional system.

Appendix I: Current Commonwealth Environmental Legislation

1. Environmental planning and protection

a. General

Environment Protection and Biodiversity Conservation Act 1999

National Environment Protection Council Act 1994

National Environment Protection Measures (Implementation) Act 1998

b. Chemicals and other risk assessment

Agricultural and Veterinary Chemicals (Administration) Act 1992

Agricultural and Veterinary Chemicals Act 1994

Agricultural and Veterinary Chemicals (Code) Act 1994

Asbestos Safety and Eradication Act 2013

Food Standards Australia and New Zealand Act 1991

Gene Technology Act 2000

Industrial Chemicals (Notification and Assessment) Act 1989

Therapeutic Goods Act 1989

c. Waste management/recycling

Hazardous Waste (Regulation of Exports and Imports) Act 1989

Product Stewardship Act 2011

d. Marine

Environment Protection (Sea Dumping) Act 1981

Protection of the Sea (Civil Liability) Act 1981

Protection of the Sea (Civil Liability for Bunker Oil Pollution Damage) Act (2008)

Protection of the Sea (Harmful Anti-Fouling Systems) Act 2006

Protection of the Sea (Oil Pollution Compensation Fund) Act 1993 (and related Acts)

Protection of the Sea (Powers of Intervention) Act 1981

Protection of the Sea (Prevention of Pollution from Ships) Act 1983

Sea Installations Act 1987

e. Nuclear

Atomic Energy Act 1953

Australian Radiation Protection and Nuclear Safety Act 1998

Comprehensive Nuclear Test Ban Treaty Act 1998

National Radioactive Waste Management Act 2012

Nuclear Non-proliferation (Safeguards) Act 1987

Nuclear Safeguards (Producers of Uranium Ore Concentrates) Act 1993

South Pacific Nuclear Free Zone Treaty Act 1986

f. Transport

Aircraft Noise Levy Act 1995

Fuel Quality Standards Act 2000

Motor Vehicle Standards Act 1989

2. Biodiversity and cultural heritage

a. Antarctica

Antarctic Marine Living Resources Conservation Act 1981

Antarctic Treaty (Environment Protection) Act 1980

b. Biodiversity

Biological Control Act 1984

Environment Protection and Biodiversity Conservation Act 1999

Environment Protection (Alligator Rivers Region) Act 1978

Great Barrier Reef Marine Park Act 1975

Lake Eyre Basin Intergovernmental Agreement Act 2001

Biosecurity (Consequential Amendments and Transitional) Act 2015

Wet Tropics of Queensland World Heritage Area Conservation Act 1994

c. Aboriginal and Cultural Heritage

Aboriginal and Torres Strait Islander Heritage Protection Act 1984

Australian Heritage Council Act 2003

Historic Shipwrecks Act 1976

Natural Heritage Trust of Australia Act 1997

Protection of Moveable Cultural Heritage Act 1986

Sydney Harbor Federation Trust Act 2001

3. Natural resources management

a. Fisheries

Fisheries Administration Act 1991

Fisheries Management Act 1991

Torres Strait Fisheries Act 1984

b. Forests

Illegal Logging Prohibition Act 2012

Regional Forests Agreement Act 2002

c. Minerals and Petroleum

Offshore Minerals Act 1994

Offshore Petroleum and Geothermal Gas Storage Act 2006

Petroleum (Submerged Lands) Amendments Acts 2001/2003

Petroleum (Timor Sea Treaty) Act 2003

d. Water

Water Act 2007

Water Efficiency Labelling and Standards Act 2005

e. Other (financial assistance)

Note various financial assistance Acts have been adopted over many years: for example, *Urban and Regional Development (Financial Assistance) Act 1974*; and *Natural Resources Management (Financial Assistance) Act 1992*; still current is the *Natural Heritage Trust of Australia Act 1997*.

4. Climate change, ozone depletion and energy

a. Climate change

Australian National Registry of Emissions Units Act 2011

Carbon Credits (Carbon Farming Initiative) Act 2011

Climate Change Authority Act 2011

Greenhouse and Energy Minimum Standards Act 2012

National Greenhouse and Energy Reporting Act 2007

b. Ozone depletion

Ozone Protection and Synthetic Greenhouse Gases Management Act 1989

c. Energy

Australian Energy Market Act 2004

Australian Renewable Energy Agency Act 2011

Building Energy Efficiency Disclosure Act 2010

Clean Energy Finance Corporation Act 2012

Clean Energy Regulator Act 2011

Customs And Excise Amendment (Diesel Fuel Rebate Scheme) Act 1999

Energy Grants (Cleaner Fuels) Scheme (Consequential Amendments) Act 2004

Renewable Energy (Electricity) Act 2000

Renewable Energy (Electricity) (Charge) Amendment Act 2000

Renewable Energy (Electricity) (Large-scale Generation Shortfall Charge) Act 2000

Renewable Energy (Electricity) (Small-scale Technology Shortfall Charge) Act 2010

APEEL



The Australian Panel of Experts
on Environmental Law

TERRESTRIAL BIODIVERSITY CONSERVATION AND NATURAL RESOURCE MANAGEMENT

TECHNICAL PAPER 3

APEEL



The Australian Panel of Experts
on Environmental Law

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About APEEL

The Australian Panel of Experts on Environmental Law (APEEL) is comprised of experts with extensive knowledge of, and experience in, environmental law. Its membership includes environmental law practitioners, academics with international standing and a retired judge of the Federal Court. APEEL has developed a blueprint for the next generation of Australian environmental laws with the aim of ensuring a healthy, functioning and resilient environment for generations to come. APEEL's proposals are for environmental laws that are as transparent, efficient, effective and participatory as possible. A series of technical discussion papers focus on the following themes:

1. The foundations of environmental law
2. Environmental governance
3. Terrestrial biodiversity conservation and natural resources management
4. Marine and coastal issues
5. Climate law
6. Energy regulation
7. The private sector, business law and environmental performance
8. Democracy and the environment

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Summary and Recommendations

Executive Summary

The ongoing ecological harm to Australia's land, water and air, and the loss of the species that depend on them, is overwhelming our environmental laws. Australia's large landmass and relatively small population, coupled with historical factors and poor environmental stewardship pose a significant management challenge.

Australia has international obligations to ensure biodiversity protection and the sustainability of land, water and air; and to protect places of cultural and environmental significance. Australia can show greater leadership as a biodiversity rich, wealthy country. Australia invests insufficient resources and energy in protection and restoration, due to factors including a lack of information about the condition of the environment and of long-term strategic natural resource planning. Public resources are inevitably limited and so attention must turn to using private sector resources more effectively to create greater national capacity. Fragmentation of governance institutions, laws and efforts, due to many factors, has added to the difficulties of achieving a sustained and coordinated response.¹ The problems Australia must deal with involve increasingly complex causes that demand a far more comprehensive and coordinated response in the future than has been demonstrated to date.

A multi-pronged approach to biodiversity conservation and natural resource management (NRM) law reform is needed. Real reform will be costly, and some initiatives will encounter opposition, but more effective environmental law is essential to the long-term viability of ecological systems, agricultural production, and community amenity and wellbeing. Meeting the challenges requires the commitment of the Commonwealth and state governments to implement an effective mix of land use and other environmental forms of regulation, economic incentives, and voluntary instruments.

Part 2 of this *Technical Paper* recommends a more strategic approach to the core problems.

Specific recommendations include:

GOVERNANCE FRAGMENTATION

- 3.1 *The Commonwealth should ensure integrated resource governance, by undertaking landscape-scale planning at appropriate bioregional scales and establishing nationally coordinated frameworks for the implementation of bioregional plans. This will require a consistent hierarchy of rules, roles and responsibilities.²*

THE NATIONAL RESERVE SYSTEM

- 3.2 *The Commonwealth should ensure completion of the National Reserve System (NRS), to provide legal protection for the full range of ecosystems within bioregions and subregions.³ Related steps are needed to safeguard climate refugia and ensure connectivity across the landscape.*

1 In relation to systemic challenges for rural biodiversity protection see Paul Martin and Jacqueline Williams 'Next Generation Rural Natural Resource Governance: a Careful Diagnosis' in V Mauerhofer (ed) *Legal Aspects of Sustainable Development: Horizontal and Sectorial Policy Issues* (Springer Publishers, 2015) 607.

2 Note that Australian Panel of Experts on Environmental Law, *Environmental Governance* (Technical Paper 2, 2017) elaborates on the specific means by which the Commonwealth could implement this recommendation.

3 Much of the necessary additions to the NRS will need to be made by the states, however the Commonwealth can play a significant role in securing state action through financial assistance and targeted disincentives (see Australian Panel of Experts on Environmental Law, *Environmental Governance* (Technical Paper 2, 2017)).

MONITORING, EVALUATION AND IMPROVEMENT

- 3.3 *The Commonwealth should perform enhanced environmental monitoring, evaluation and reporting tasks. This requires a strategic approach to determining what data is needed for effective decision-making, who should be responsible for providing and collecting it, how frequently it should be collected, how it should be made available and used, and who should pay for this intelligence.⁴*

DEVELOPMENT APPROVAL⁵

- 3.4 *A governance system is required at the Commonwealth and state levels which is more adaptive to environmental change. This will require outcome objectives for the state of environmental resources, quantitative and measurable thresholds, and legal tools to implement stronger protections if systems or species are at risk of exceeding these thresholds.⁶*

NOTE: A comprehensive approach to landscape-scale planning (Recommendation 3.1) could also help overcome the deficiencies of fragmented project-specific development approval processes that do not address cumulative impacts.

IMPLEMENTATION

- 3.5 *Stronger safeguards are needed to ensure the integrity of implementation of legal and administrative protections for the environment. These should include independent performance review, with clear reporting to the public, incorporated into Commonwealth and state legislation.*

OTHER RECOMMENDATIONS

In addition to these legal recommendations, two other issues should be addressed to ensure effective and fair governance: more reliable and adequate funding of sustainability investments and a stronger role for indigenous communities in biodiversity conservation and natural resources management.

- 3.6 *The Commonwealth should work with the states and the private sector to develop an effective fiscal model for natural resource governance. This should ensure that the costs of environmental stewardship can be met over the long term, and are borne equitably across the community.*
- 3.7 *The Commonwealth and state governments should make a clear commitment to ensure effective consultation with, and the active participation of, Aboriginal and Torres Strait Islander peoples in environmental protection measures, cultural heritage and natural resource management (NRM). This commitment requires support for robust and culturally appropriate governance for Indigenous Protected Areas (IPAs), co-managed areas and Aboriginal and Torres Strait Islander peoples' land and waters and respect for the principle of free, prior and informed consent in regard to Aboriginal and Torres Strait Islander land and waters.⁷*

⁴ See Australian Panel of Experts on Environmental Law, *Environmental Governance* (Technical Paper 2, 2017), for consideration of the functions of a new Commonwealth environmental institution.

⁵ Note that additional recommendations with respect to reform of the EIA provisions of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) are presented in Australian Panel of Experts on Environmental Law, *Environmental Governance* (Technical Paper 2, 2017).

⁶ The means by which such a governance system could be developed across the Commonwealth and state levels of government is explored in Australian Panel of Experts on Environmental Law, *Environmental Governance* (Technical Paper 2, 2017), in particular the idea of requiring state implementation plans (SIPs) to be developed and approved in relation to bioregional plans is advanced as a possible means of securing a consistent and coordinated approach to reform of the governance systems related to biodiversity and natural resources management.

⁷ APEEL acknowledges that free, prior and informed consent (FPIC) enjoys recognition as a 'soft law' principle in international law. Whilst it has not yet been afforded legally binding status in Australian law, APEEL is aware that it is being applied in practice in a range of contexts. In Australian Panel of Experts in Environmental Law, *Democracy and the Environment* (Technical Paper 8, 2017), the Panel presents a more detailed discussion of FPIC, including its procedural and substantive dimensions, and present some specific recommendations in relation to its future status in Australian law.

HOW TO CONTRIBUTE TO THE APEEL PROJECT

APEEL invites you to provide your responses to the ideas and recommendations presented in this paper. This will assist the development of our final proposals for the next generation of Australian environmental laws.

We look forward to your engagement on specific reform options as the APEEL journey progresses.

Please send your responses to: admin@apeel.org.au or go to www.apeel.org.au where you can do so online.

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1. Introduction

The Australian Panel of Experts on Environmental Law (APEEL) aims to make natural resource laws and institutions more effective, efficient and fair. Environmental governance, of which laws are a key part, is a system to manage land, water, biodiversity and habitat and the interactions between these. Natural resource management (NRM) concerns the conservation and ecologically sustainable use of natural resources (which include biodiversity and ecosystem processes). It involves many activities as well as conservation, including farming, mining, invasive species, water use, soils and salinity and many complex issues. Resource management issues often cross tenures (public, leasehold, private and indigenous) and involve competing interests. Management is required of both existing activities (for example, agricultural activities) and proposed developments (for example, mining).

This *Technical Paper* examines the laws that address these diverse management challenges. It focuses on three terrestrial issues: biodiversity, non-urban water, and invasive species, but these are representative of a much larger set. This selectivity means the paper will inevitably fail to capture all of the concerns involved in other areas such as forestry or mining, or deal with all legal mechanisms, such as environmental impact assessment (EIA). However, these three fields do provide windows into conservation and NRM more broadly, allowing insights relevant to the whole governance system.

This *Technical Paper* is in three parts:

- Part 1 defines key issues
- Part 2 outlines why reform is needed
- Part 3 outlines recommendations and questions for discussion.

2. Key issues

2.1 Status, pressures and outcomes

European settlement occurred only two centuries ago. In many parts of the country, the methods of land use and resource exploitation that accompanied colonisation rapidly replaced indigenous peoples' management that had developed over many thousands of years.⁸ The expansion of European settlement has significantly affected Australia's unique biology and ecology and many resulting harms are ongoing.⁹ Historically, clearing of land for agriculture had a significant impact on native biodiversity. By 2011, around 53% of Australia's land area had been converted to agriculture.¹⁰ Threats to nature from human action include species and habitat loss; loss of connectivity across the landscape; development in peri-urban and rural areas; and in-fill development in urban areas.

Urbanisation and industrialisation, mining and other human uses have all had significant impacts, including on surface water and groundwater. Freshwater holds over 10% of all life on the planet and is central to terrestrial biodiversity.¹¹ Water policy reforms have attempted to manage changes to hydrology caused by over-allocation of water.¹² However, projected growth in population and food demands suggests that water needs will increase. Droughts also pose significant risks for Australia, one of the driest continents.¹³

Other impacts include diseases, fungi, parasites, vertebrate animals (including birds), fish (marine and freshwater), insects and weeds (aquatic and land). Australia now hosts more than 400 invasive species.¹⁴ Invasive species constitute 16 of the 21 key threatening processes listed under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (*EPBC Act*) and the challenge is identified as one of five key priorities in the national biodiversity strategy.¹⁵

These are just some of the threats considered in the three interwoven areas this paper focuses on (biodiversity, freshwater and invasive species).

Climate change is predicted to exacerbate many biodiversity threats.¹⁶ Ecological responses will be complex and impacts on species will be significant.¹⁷ Vegetation communities will be replaced. Some species will become extinct. Much of this harm is no longer avoidable.¹⁸ Impacts will need to be managed even as human uses of the landscape adjust to climate change, which may lead to more intense land use¹⁹ and demands for new production areas. Proposals for greater exploitation of Northern Australia point to development pressures in areas that have previously not been intensively exploited.

8 See *Mabo v Queensland [No 2]* (1992) 175 CLR 1 [37].

9 State of the Environment 2011 Committee, *Australia State of the Environment 2011 – Independent report to the Australian Government Minister for Sustainability, Environment, Water, Population and Communities* (2011) 568.

10 Australian Bureau of Statistics, *Agricultural Commodities Australia 2010-11* (30 May 2013) <<http://www.abs.gov.au/ausstats/abs@.nsf/Products/7121.0~2010-11~Main+Features~Land+Use?OpenDocument>>.

11 United Nations Water, *Water and Biodiversity* (2013) <http://www.unwater.org/downloads/water_and_biodiversity.pdf>.

12 National Water Commission, *The National Water Initiative – securing Australia's water future: 2011 assessment* (2011).

13 Will Steffen, 'Thirsty Country: Climate change and drought in Australia' (Report, Climate Council of Australia Ltd, 2015) <<http://www.climatecouncil.org.au/uploads/37d4a0d2a372656332d75d0163d9e8b8.pdf>>; Wentworth Group of Concerned Scientists, 'Blueprint for a Healthy Environment and a Productive Economy' (Statement, Wentworth Group of Concerned Scientists, 2014) <<http://wentworthgroup.org/wp-content/uploads/2014/11/Blueprint-for-a-Healthy-Environment-and-a-Productive-Economy-November-2014.pdf>>.

14 Invasive Species Specialist Group, *Global Invasive Species Database* <<http://www.issg.org/database/welcome/>>.

15 Natural Resources Management Ministerial Council, *Australia's Biodiversity Conservation Strategy 2010-2030* (2010).

16 For an illustration of systemic effects of climate on invasive species see: Pippa Michael et al, 'Climate Change Impacts on Agricultural Weeds in Western Australia' (Report No.11/059, Australian Government Rural Industries Research and Development Corporation, October 2011); Rural Industries Research and Development Corporation, 'National Weeds Research: A summary of research outcomes from the National Weeds and Productivity Research Program 2011-2012' (Report, Australian Government, Rural Industries Research and Development Corporation, October 2012); Michael Dunlop et al, 'The implications of climate change for biodiversity conservation and the National Reserve System: Final Synthesis' (Report, Department of Sustainability, Environment, Water, Population and Communities, and the Department of Climate Change, September 2012) 31-32 <<https://publications.csiro.au/rpr/download?pid=csiro:EP105380&dsid=DS4>>.

17 Michael Dunlop et al, 'Climate-ready conservation objectives: A scoping study' (Final Report, National Climate Change Adaptation Research Facility, 2013) 12.

18 Ibid; Will Steffen et al, 'Australia's biodiversity and climate change: A strategic assessment of the vulnerability of Australia's biodiversity to climate change - summary for policy makers 2009' (Commonwealth of Australia, 2009) 13.

19 Dunlop et al, above n 16, 6, 57.

2.2 The need for biodiversity stewardship and resource management

Biodiversity is a fundamental natural resource. In practice, this resource is taken for granted. The general community does not pay for most natural environmental services from which it benefits, nor generally are those who put these services at risk made to pay for the harm caused.²⁰ Plants produce the oxygen that we breathe and can prevent salts from rising to the surface, protecting the soil needed to grow crops. Vegetation traps and breaks down pollutants, purifying water, and it slows run-off, mitigating floods. Wetlands act as spawning and nursery grounds for fish. The myriad of other environmental services from which people benefit (but fail to value sufficiently), include pollination of crops, pest control by native predators and recreational opportunities. Many of these natural sources of value to human beings are being depleted or put at risk, highlighting the need for far more effective stewardship of the natural environment.

Invasive species illustrate the need for more effective stewardship. The Australian Bureau of Statistics reports the costs of weeds to agriculture as exceeding \$3.4 billion annually.²¹ Rabbits harm pastures, and have a harmful impact on 156 threatened species; wild dogs and foxes prey upon livestock, and also impact 76 threatened species; and feral pigs not only cause losses of sugar cane and grain, they also destroy up to 70% of sea turtle nests in north Queensland.²² The Australian 2011 *State of the Environment Report* (at pages 641 and 237) indicates that the impact of invasive species on biodiversity is 'high' to 'very high' and conditions are deteriorating, and the impact on inland waters is 'high' and conditions are deteriorating. Systemic harms are less obvious, such as hotter fires in northern Australia from the burning of Gamba grass, potentially causing fundamental changes to tropical ecosystems. A recent study considering only six potential invasive plants and animals suggests that biosecurity is worth an average of \$12,000 p.a. to \$17,500 p.a. for each broad-acre farm.²³

Ensuring sustainable high quality water supplies is central to the environment and the economy. Freshwater holds around 10% of all life on the planet, with Australian rivers, wetlands and groundwater systems providing habitat for flora, fauna and their linked catchments and climate.²⁴ While rivers and aquifers have different local ecologies, their health depends on their capacity to support key environmental functions (for example, temperature regulation, nutrient cycling and salt balance), as well as communities and populations of native species.²⁵ However, many inland water environments are in a degraded condition, particularly in southern Australia and the Murray Darling Basin.²⁶ There are numerous, often historic, causes of this degradation, including droughts, resource development and over-allocation, as well as pollution and habitat destruction.²⁷ While there have been major recent governance reforms for water and environmental flows, alterations to the natural flow regimes of rivers, streams and their flood plains and wetlands²⁸ have all changed ecological processes over the last 200 years. Ecosystem functions have been significantly affected, with significant declines in many native species populations.²⁹

In economic terms, industry used approximately 16,772 gigalitres (GL) of water in 2013/14, with an Industry Gross Value Added per GL of water consumed of \$88 million. In total, agriculture uses the largest volume of water (62% of Australia's total water consumption), with a gross value of irrigated agricultural production of \$14.6 billion in

20 Department of the Environment and Heritage (Cth) 'Making economic valuation work for biodiversity conservation' (2005); K Whiteoak and J Binney, 'Literature Review of the Economic Value of Ecosystem Services that Wetlands Provide' (Final Report, Marsden Jacob Associated, 2012).

21 Australian Bureau of Statistics, *1301.0 - Year Book Australia Land and Biodiversity* (2012) <<http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject%201301.0~2012~Main%20Features~Land%20and%20biodiversity~278>>.

22 Cost details provided in P Martin et al, 'Effective citizen action on invasive species: The institutional challenge' (Final Discussion Paper, Invasive Animals Cooperative Research Centre, 3 May 2016) <http://www.pestsmart.org.au/wp-content/uploads/2016/05/DiscussionPaper_InstitutionalChallenge.pdf>.

23 A Hafi et al, 'The value of Australia's biosecurity system at the farm gate: an analysis of avoided trade and on-farm impacts' (Australian Bureau of Agricultural and Resource Economics and Sciences, 2015).

24 State of the Environment 2011 Committee, above n 9, 201; Walter Reid et al, *Millennium Ecosystem Assessment* (Island Press, 2005).

25 State of the Environment 2011 Committee, above n 9, 201.

26 Commonwealth Scientific and Industrial Research Organisation, 'Assessment of the ecological and economic benefits of environmental water in the Murray-Darling Basin' (Final report to the Murray-Darling Basin Authority from the CSIRO Multiple Benefits of the Basin Plan Project, March 2012) <https://www.acfonline.org.au/sites/default/files/resources/MDBA-Assessment_Ecological_Economic_Benefits.pdf>.

27 Ibid; State of the Environment 2011 Committee, above n 9, 201.

28 Office of Heritage and Environment, *List of Key Threatening Processes* (30 June 2016) <<http://www.environment.nsw.gov.au/threatenedspecies/KeyThreateningProcessesByDoctype.htm>>; see also Whiteoak and Binney, above n 20.

29 State of the Environment 2011 Committee, above n 9, 201.

2013-14.³⁰ Water has value for many other purposes, including water supply, sewerage and drainage services, industry, household uses, mining and manufacturing. Alteration to the natural flow regimes of rivers and streams and their flood plains and wetlands has been identified as a key threatening process under NSW legislation.³¹ With increased demands and climate change, the pressures on this resource will become more intense.

Existing environmental governance is straining under many pressures, and will need to become far more effective to cope in the future. Discussion of many other aspects of biodiversity and landscapes, or urban, coastal, ocean or other issues would show a similar pattern: environmental laws, and other environmental governance arrangements, which have struggled to deal with past challenges will need to become far more effective and efficient to deal with the issues that will soon be encountered.

2.3 Overview of institutional arrangements

Rules governing human use of the natural environment – land, water, air, minerals, species, and forests - have often failed to protect nature. Many early laws encouraged exploitation with little consideration of sustainability. Over the last 30 years, new laws have been made, aiming to preserve the environment, and encourage ecologically sustainable development (ESD). They promote ecologically sustainable practices on land controlled by the state, such as national parks, state forests and water catchments; and on private freehold or leasehold land. Aboriginal and Torres Strait Islander peoples have a connection to, and obligations of duty and respect for, traditional ‘country’.³² ‘Co-management’ arrangements for Aboriginal and Torres Strait Islander land typically promote sustainable practices alongside cultural heritage and indigenous communities’ relationships to land and waters.³³

Increasingly diverse land uses, interests and developments have led to NRM arrangements ranging from prescriptive regulation through to voluntary codes and standards. Formal arrangements include EIA, reserve systems, bioregional planning, species listing, pollution control, prohibitions on activities that may damage nature, and licences to use nature. Market instruments include tradeable rights in water, carbon and biodiversity. Voluntary approaches include Landcare and other ‘care’ activities, conservation agreements between landholders and government, industry and non-government standards and codes, environmental branding and consumer standards, and private philanthropy to fund conservation measures. Some of these arrangements are addressed by Commonwealth law (particularly the *EPBC Act*), while many fall under state law (for example, native vegetation laws). Some are addressed under both Commonwealth and state law (for example, threatened species). Even apparently voluntary arrangements such as environmental branding and standards depend upon the law, such as contract, property, or consumer protection laws, to protect interests or maintain the integrity of brands and standards.

Environmental governance is administered by many government and non-government bodies, often with roles that overlap and are poorly coordinated. This creates governance ‘silos’ which are ill-equipped to effectively manage the complex interactions between water, land, biodiversity and the many human activities such as land development, mining and irrigation. Adding to the complexity, natural and social systems constantly change. Climate change combined with other social, economic or demographic drivers will create new dynamics. The operation of different laws and instruments, administered by many government and non-government bodies at local, state and national levels of government, when coupled with the increasing diversity of land use and land tenures, and changing environmental and social conditions, will create many complications that will challenge environmental law.

30 This is a little over 2% of Australia’s Gross Domestic Product. Of the \$39 billion, \$11.5 billion comes from irrigated agriculture. Australian Bureau of Statistics, *Water Account Australia 2012-13* (25 November 2015) < <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/4610.02012-13?OpenDocument> > (Noting that this represented a 36% increase from 2011-12); Australian Government, *Our North, Our Future: White Paper on Developing Northern Australia* (2015) 12; P Martin et al, ‘Improving Invasive Animal Institutions: A citizen-focused approach. A citizen-focused review of institutional arrangements for Invasive Animal management’ (Program 4 scoping document (unpublished) Invasive Animals CRC, 2014).

31 Office of Heritage and Environment, above n 28; see also Whiteoak and Binney, above n 20.

32 See for example, Rod Kennett et al, *Implementing native title: Indigenous leadership in land and water livelihoods* (Australian Institute of Aboriginal and Torres Strait Islander Studies, 2015).

33 Rosemary Hill et al, ‘Workshop on Indigenous Co-management and Biodiversity Protection: Towards a framework for evaluation in Australia’s wet tropics Report to the National Environmental Research Program. Reef and Rainforest Research Centre Limited’ (The Reef and Rainforest Research Centre on behalf of the Australian Government’s National Environmental Research Program Tropical Ecosystems Hub Cairns, 2012) 20.

2.3.1 Constitutional arrangements

Historically, the states had responsibility for land and NRM issues (with local government having varied roles in each state). However, the intersection of Australian Government responsibilities under international conventions, such as the United Nations *Convention on Biological Diversity*;³⁴ the fiscal power of the Commonwealth; and negotiated arrangements that have emerged over many years have resulted in an increasingly complex hybrid of government roles, and increasing Commonwealth involvement.³⁵

Under the *Australian Constitution*, states have powers to make laws in respect of NRM or environmental issues provided they are not inconsistent with Commonwealth legislation made under its constitutional powers. For example, the external affairs power allows the Commonwealth to implement international conventions such as the United Nations *Convention on Biological Diversity*. Attempts by the Commonwealth to use constitutional powers to expand its involvement in NRM issues such as World Heritage management have led to conflicts with state governments. In recent years, the states and Commonwealth have tried to avoid these conflicts using cooperative approaches, with the constitutional arrangements for the Murray Darling Basin exemplifying these approaches.³⁶

The *Intergovernmental Agreement on the Environment 1992 (IGAE)* recognised that the Commonwealth's role is focused on national environmental issues, including international obligations, environmental effects that span state boundaries, and the marine environment.³⁷ This approach emphasises consultation with the states.³⁸ Working cooperatively, the Commonwealth and states have developed policies and strategies to coordinate action across the jurisdictions and the three levels of government. These include:

- *National Strategy on Ecologically Sustainable Development*;
- *National Water Initiative*;
- *Australia's Oceans Policy*;
- *National Forests Policy*;
- *Australian Weeds Strategy*;
- *National Cooperative Approach to Integrated Coastal Zone Management*; and
- *Biodiversity Conservation Strategy*.

Even with coordinating arrangements like Ministerial Councils, conflict between overlapping state and federal legislation arises. To manage this overlap, the *IGAE* established a structure for the Commonwealth to accredit some state processes, resulting in collaborative implementation.³⁹ The environmental assessment process under the Commonwealth's *EPBC Act* uses this approach. The *EPBC Act* requires Commonwealth approval for activities that are likely to significantly affect 'matters of national environmental significance' (MNES) using a process of referral and assessment.⁴⁰ These include: national heritage places; RAMSAR wetlands of international importance; nationally listed threatened species and ecological communities; nationally listed migratory species; nuclear actions; the Commonwealth marine environment; the Great Barrier Reef Marine Park; and water resources in relation to coal seam gas (CSG) and substantial coal mines. A number of these MNES reflect legal responsibilities the Commonwealth has under international law.⁴¹ The *EPBC Act* assessment process operates concurrently with state and territory EIA

³⁴ It is the Australian Commonwealth government as the 'nation state' that enters into international treaties and conventions.

³⁵ See for example, *Intergovernmental Agreement on Biosecurity* (January 2012).

³⁶ In effect, there was a negotiated referral of state powers to the Commonwealth Government.

³⁷ *Intergovernmental Agreement on the Environment 1992*, art 2.2.1. However, as noted above, the Commonwealth has undertaken consultation with the states before committing to any international agreements; Gerry Bates, *Environmental Law in Australia* (LexisNexis Butterworths, 2013) 141-142.

³⁸ *Intergovernmental Agreement on the Environment*, above n 37. For further information, see Rosemary Lyster et al, *Environmental & Planning Law in New South Wales* (The Federation Press, 2012).

³⁹ *Intergovernmental Agreement on the Environment*, above n 37, art 2.5, schedule 2; Lee Godden and Jacqueline Peel, *Environmental Law Scientific, Policy and Regulatory Dimensions* (Oxford University Press, 2009) 74-75.

⁴⁰ See for example, J Johnson, 'Commonwealth Environmental Assessment and Approval' in D Farrier and P Stein (eds), *The Environmental Law Handbook* (Thomson Reuters, 5th ed, 2011) 274-303.

⁴¹ See for example, Bates, above n 37, 143; *EPBC Act* ss 15B, 16, 18, 20, 21, 23, 24B, 24D.

legislation.⁴² Where a project requires federal assessment it may be assessed under accredited state or territory legislation on a one-off basis or through bilateral agreements.⁴³ The final decision on whether to give approval for actions under the Act currently still lies with the Commonwealth, as ‘approval’ powers have not been delegated to state and territory governments.⁴⁴ A different approach has been used to coordinate water management, discussed below.

2.4 Current arrangements for biodiversity conservation and NRM

The paper will now consider the laws which address the management challenges outlined above. It will focus on the following areas: biodiversity, non-urban water, and invasive species. As discussed in Part 2 below, the Panel has confined its discussion here to these three key areas to provide windows into conservation and NRM more generally.

2.4.1 Conserving Biodiversity

Conservation laws in Australia link environmental protection and land use in two main ways: a system of protected areas managed for conservation; and mechanisms relating to the use and development of private land, including restrictions to protect listed species and remnant vegetation, and voluntary management agreements.

The national reserve system (NRS) incorporates nature conservation areas protected under Commonwealth, state and territory legislation, including private land under perpetual covenant and Indigenous Protected Areas (IPAs). The traditional approach in Australia (under which protected areas were principally publicly owned) is changing. Over 5% of the NRS is made up of private land, managed under agreement between government (Commonwealth, state or territory) and the landholder.⁴⁵ Forty three per cent of the NRS (over 7% of Australia) comprises IPAs. IPAs become part of the NRS when indigenous peoples consent to manage ‘country’, in accordance with their law, custom and culture, and consistently with national and international conservation guidelines.⁴⁶ Some public funding for these areas has been provided under the National Landcare Programme. Well-established programmes such as ‘Healthy Country Planning’ for IPAs build on earlier ‘co-management’ and ‘partnerships’ approaches to biodiversity conservation, but institute a stronger model of governance by indigenous communities.⁴⁷ These programmes intend not only to conserve biodiversity, but also to provide employment and training opportunities for indigenous people in remote areas.⁴⁸ For indigenous communities in remote regions, participation in biodiversity conservation can promote a hybrid economy where cultural responsibilities for land and water management can coincide with economic opportunities to sustain communities in the longer term. Increasingly, Aboriginal and Torres Strait Islander peoples and their activities in caring for country are central to a range of conservation and environmental protection measures.⁴⁹

The aim of the NRS is to protect a Comprehensive, Adequate and Representative selection of regional ecosystems representing Australia’s bioregions and subregions, using the CAR principles.⁵⁰ Comprehensiveness requires inclusion of the full range of regional ecosystems at an appropriate scale within and across each IBRA region (Interim Biogeographic Regionalisation for Australia). ‘Representativeness’ is ‘Comprehensiveness’ at a finer scale: to protect sites that reflect the intrinsic variability of ecosystems.

42 EPBC Act s 10.

43 This process establishes requirements to be met by state and territory processes, but does not necessarily guarantee ‘best practice’ will be met. Godden and Peel, above n 39, 75–76. See *Environment Protection and Biodiversity Conservation Regulations 2000* (Cth) sch 1; EPBC Act ss 48, 50.

44 Currently there are no state or territory bilateral agreements under the EPBC Act in place for approval of controlled actions, although in most instances draft agreements are being negotiated. By contrast, bilateral assessment agreements are in place for all states and territories.

45 Department of the Environment (Cth), *Ownership of protected areas* (12 February 2016) <http://www.environment.gov.au/land/nrs/about-nrs/ownership> (*Ownership of protected areas*). Agreements must last for at least 99 years, and ideally in perpetuity. While they can be terminated, both parties must first agree: *Standards for inclusion in the National Reserve System* in Department of the Environment (Cth), *Private landholders* (12 February 2016) <<http://www.environment.gov.au/land/nrs/getting-involved/private-landholders>>.

46 Lee Godden and Stuart Cowell, ‘Conservation planning and Indigenous governance in Australia’s Indigenous Protected Areas’ (2016) 24(5) *Restoration Ecology: The Journal of the Society for Ecological Restoration* 692.

47 See for example, Lauren Butterly, ‘Changing Tack: Akiba and the Way Forward for Indigenous Governance of Sea Country’ (2013) 17 *Australian Indigenous Law Review* 2.

48 Department of the Environment (Cth), above n 45; Department of the Prime Minister and Cabinet, *IPAs – Indigenous Protected Areas* <<https://www.dpmc.gov.au/indigenous-affairs/environment/indigenous-protected-areas-ipas>>.

49 Jon Altman and Seán Kerins (eds), *People on country: vital landscapes indigenous futures* (Federation Press, 2012).

50 Department of the Environment, *Australian Bioregions (IBRA)* (12 February 2016) <<http://www.environment.gov.au/land/nrs/science/ibra>>; Comprehensiveness, Adequacy and Representativeness (CAR) principles: Task Force on Marine Protected Areas, *Understanding and applying the principles of comprehensiveness, adequacy and representativeness for the NRSMPA, Version 3.1* (Report prepared by the Action Team for the ANZECC Task Force on Marine Protected Areas. Marine Group, Environment Australia, Canberra, 1999) <<https://www.environment.gov.au/system/files/resources/ef577ee6-e36e-4435-adf9-cbb5600728a3/files/nrsmpa-principles.pdf>>.

There is general agreement that the NRS can remain vital to protecting nature, notwithstanding changes in species composition and habitats resulting from climate change,⁵¹ because it reflects the geographic diversity of the landscape that generates ecosystem diversity (including soils, geology, topography, micro-climate).⁵² However there are significant gaps in coverage.⁵³ Given the importance of the NRS to conservation, it is essential to address its shortcomings.

Even if the NRS were complete, there would be a need for further conservation across the landscape, including on private land, to provide connectivity between areas, to ensure adequate protection of species that are not located within the NRS, and as an important part of Australia's international carbon emission control programme. Both state and Commonwealth laws regulate land clearing and harm to threatened species. For example, the listing of a species as threatened under the *EPBC Act* triggers recovery planning, approval requirements and assessment of activities likely to have a significant impact on the species.

Among these controls are requirements for approval of land clearing for mining, tourism, agricultural expansion and residential development. Existing activities, such as established agriculture are generally exempted. Regulation is procedural: provided government approval is obtained, an activity can proceed even if it is likely to have a significant impact on a threatened species. This might occur if, for example, socio-economic considerations were considered to be more important than protection of the species. In these situations, those carrying out the activities may be required to provide conservation offsets (see below).

The approach varies between state and territory jurisdictions. For example, in Victoria activities on private land affecting a listed species are only restricted on a temporary basis; long-term protection requires agreement with the landholder. In NSW, on the other hand, listing results in a wide-ranging prohibition of damaging activities, unless approval is first obtained. Where a proposed activity is likely to have a significant impact, this must be considered in deciding whether approval should be given.

As a general rule, obligations to invest time or funds to conserve or restore nature are not imposed by law. Under state and territory legislation a landholder's duty of care might extend, for example, to eradicating declared invasive species and agricultural weeds, but not to active management to protect and recover threatened species. Regulation can help to control undesirable behavior, but is not good at forcing ongoing desirable action.

Instead, government agencies, local councils and private conservation groups rely on agreements with landholders to modify existing damaging activities or to carry out conservation activities. Contrasted with the requirement for long-term commitment for land to become part of the NRS, conservation or stewardship agreements can be far more flexible. For example, perpetual protective covenants, entered into with government agencies, bind future purchasers of the land as well as the existing landholder. However, there are also agreements that are largely symbolic, lasting for a small or indefinite period, aiming for an initial commitment that might be strengthened at a later date. In situations where management interventions are modest (for example, grazing management) agreements might only last for 5 years. A commitment by landholders of 15 years or more may be required where costly restoration is involved.⁵⁴ Agreements imposing positive stewardship obligations can involve payment for the environmental management services provided by the landowner. Typically, more substantial incentives are required to persuade landholders to forego production and enter into long-term conservation agreements compared with those not using their land for business purposes.⁵⁵ Those who enter into long-term conservation agreements may also be eligible for tax deductions,⁵⁶ rate relief and land tax concessions.

51 Steffen et al, above n 18, 13; Dunlop et al, above n 16, 57.

52 Michael Dunlop and Peter Brown, 'Implications of climate change for Australia's National Reserve System: A preliminary assessment' (Department of Climate Change, February 2008) 116.

53 See part 2.4.

54 David Farrier et al, 'The Legal Aspects of Connectivity Conservation - Case Studies' (IUCN, 2013) 11-12; David Farrier, 'Legal instruments: Great Eastern Ranges initiative' in Graham Worboys et al (eds), *Protected Area Governance and Management* (ANU Press, 2015) 880-881.

55 Katie Moon and Chris Cocklin, 'A Landholder-Based Approach to the Design of Private-Land Conservation Programs' (2011) 25(3) *Conservation Biology* 493-503; Vanessa Adams, Robert Pressey and Natalie Stoeckl, 'Estimating Landholders' Probability of Participating in a Stewardship Program, and the Implications for Spatial Conservation Priorities' (2014) *PLoS ONE* 8. See also Vanessa Adams, Robert Pressey and Natalie Stoeckl, 'Estimating land and conservation management costs: The first step in designing a stewardship program for the Northern Territory' (2012) 148(1) *Biological Conservation* 44-53; Katie Moon and Chris Cocklin 'Participation in biodiversity conservation: Motivations and barriers of Australian landholders' (2011) 27(3) *Journal of Rural Studies* 331-342.

56 See Australian Taxation Office, 'Claiming Conservation Covenant Concessions' (14 October 2015) <<http://www.ato.gov.au/Non-profit/Gifts-and-fundraising/How-supporters-claim-tax-deductions/Claiming-conservation-covenant-concessions/>>. See also Australian Panel of Experts on Environmental Law, *The Private Sector, Business Law and Environmental Performance* (Technical Paper 7, 2017) for detailed discussion on the potential of the taxation system to provide incentives for improved environmental outcomes, especially with regards to land management and conservation.

2.4.2 Managing rivers and aquifers

Early water law relied on the common law. However, from the late 1800s, state governments progressively displaced common law rights with a legislative system of water licensing.⁵⁷ Problems emerged, largely because of state governments handing out more rights to water than was sustainable.⁵⁸

In response, Australia implemented national water reforms.⁵⁹ The defining features are consumption-based pricing; the separation of water rights from land title; the tradability of water rights; environmental water allocations and entitlements; and cooperative arrangements between the Commonwealth, states and territories through the Council of Australian Governments (COAG).⁶⁰ The 2004 intergovernmental *National Water Initiative (NWI)* aimed for a nationally compatible water market, a cooperative planning process for surface and groundwater resources and a compliance and enforcement system.⁶¹ The 2004 *NWI* was the first major Australian natural resource policy to recognise indigenous interests in water. Since that time, the federal and state jurisdictions have been grappling with how to appropriately reflect the values and interests of indigenous people in water allocation.⁶²

The *NWI* agreement set broad, nationally agreed goals (for example, return of all currently over-allocated or overused systems to environmentally-sustainable levels of extraction). However, it left state and territory governments with significant discretion to implement these goals within their respective jurisdictions. The *NWI* agreement accordingly created an independent National Water Commission (NWC) charged with information provision and monitoring of national and state performance.

The *Water Act 2007* (Cth), the *2008 Intergovernmental Agreement on Murray–Darling Basin Reform* and the *2013 Intergovernmental Agreement on Implementing Water Reform in the Murray Darling Basin* established water allocation arrangements for the Murray Darling Basin. The Commonwealth, through the independent Murray Darling Basin Authority, became responsible for Basin-wide planning and management. Basin states remained responsible for water resources within their jurisdictions, but agreed to align their management with the *Basin Plan 2012* (Cth) (*Basin Plan*) and its cap by 1 July 2019.⁶³ Despite many challenges, a *Basin Plan* was agreed in 2012 setting extraction caps to recover 2,750 GL of water, using infrastructure improvement and water buybacks by the Commonwealth Environmental Water Holder.⁶⁴

After the *Basin Plan*, increased mineral and gas extraction led to growing social concern. The *NWI* was slow to integrate water extraction for mining into the water management framework.⁶⁵ Conflicts over CSG led to the ‘water trigger’ amendment to the *EPBC Act*. This amendment requires an environmental approval to be obtained from the federal Environment Minister where a project is likely to have a significant impact on a water resource.⁶⁶ An Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining was established to help assess developments. States attempted to integrate CSG and coal mining into the *NWI* framework.⁶⁷ Cooperative reforms were adopted to improve assessment and scientific knowledge about the impact of mining and unconventional gas on water.⁶⁸

⁵⁷ Alex Gardner, Richard Bartlett and Janice Gray, *Water Resources Law* (Lexis Nexis, 2009).

⁵⁸ National Water Commission, ‘Sustainable Levels of Extraction: National Water Commission Position’ (Commonwealth of Australia, National Water Commission, 2010).

⁵⁹ Lee Godden and Anita Foerster, ‘Introduction: institutional transitions and water law governance’ (2011) 22(2-3) *The Journal of Water Law* 53.

⁶⁰ Commonwealth of Australia, ‘Report of the Independent Review of the Water Act 2007’ (Independent Review, 2014); Council of Australian Governments, ‘The Council of Australian Governments’ Water Reform Framework’ (Environment Australia, Marine and Water Division, 25 February 1994) Attachment A Water Resource Policy, 3.

⁶¹ *Intergovernmental Agreement on a National Water Initiative between the Commonwealth of Australia and the Governments of New South Wales, Victoria, Queensland, South Australia, the Australian Capital Territory and the Northern Territory* (National Water Initiative, 2004) 3 [23] (*Intergovernmental Agreement on a National Water Initiative*).

⁶² Sue Jackson and Marcus Barber, ‘Recognition of indigenous water values in Australia’s Northern Territory: current progress and ongoing challenges for social justice in water planning’ (2013) 14(4) *Planning Theory & Practice* 435.

⁶³ *Water Act 2007* (Cth) pt 9.

⁶⁴ Murray-Darling Basin Authority, *Sustainable Diversion Limits* (2015) <<http://www.mdba.gov.au/what-we-do/water-planning/sdl>>; Kathleen Bowmer, ‘Water Resources in Australia: Deliberation on Options for Protection and Management’ (2014) 21(3) *Australasian Journal of Environmental Management* 228.

⁶⁵ Isabelle Whitehead, ‘Better protection or pure politics? Evaluating the ‘water trigger’ amendment to the EPBC Act’ (2014) 1 *Australian Environmental Law Digest* 23; *Intergovernmental Agreement on a National Water Initiative*, above, n 61, 6; National Water Commission, ‘Water for Mining and Unconventional Gas under the National Water Initiative’ (Commonwealth of Australia, National Water Commission, 2014).

⁶⁶ *EPBC Act* s 24E.

⁶⁷ See for example, *NSW Aquifer Interference Policy 2012* (NSW).

⁶⁸ These include Australian Government initiatives such as the *National Harmonised Regulatory Framework for Natural Gas from Coal Seam 2013* (Cth) and the Department of the Environment’s ‘Bioregional Assessment program’ (2016) for an understanding of the impacts of large coal mines and CSG operations.

In 2015, the NWC was abolished and its statutory functions were transferred to other Commonwealth agencies. **The states and territories continue to implement the NWI, Basin Plan 2012 and related reforms, using their different legislative frameworks, statutory and non-statutory planning instruments and institutions, such as the Commonwealth Environmental Water Holder.**⁶⁹ Balancing water allocation between consumptive and environmental uses has been plagued by conflicts and reform fatigue exists.⁷⁰

2.4.3 Controlling invasive species

There are four main activities in invasive species governance. These are (1) biosecurity to prevent new invasions; (2) responses to invasive species before they become naturalised; (3) control of established invasive species, to minimise their harm; and (4) coordination, to optimise effectiveness and investment. Each activity involves specialised institutions and laws.⁷¹ Effective efforts rely upon science, education and extension, financial support, public works, voluntary action, and peer group pressure and support, as well as the law. Invasive species laws have traditionally focused upon controlling specific harmful species and the behaviour of the individual land steward, rather than managing systems.

Biosecurity Australia is responsible for pre-border entry approvals, and border inspection is the responsibility of the Australian Quarantine and Inspection Service. The Office of the Chief Plant Protection Officer and Office of the Chief Veterinary Officer, working with states and territories, respond to new invasions. Emergency responses can involve many organisations depending on the nature and location of the outbreak. States have their own quarantine arrangements. The National Biosecurity Committee coordinates implementation of a national agreement on biosecurity. The Invasive Plants and Animals Committee reports to that body. There are different arrangements for dealing with marine pests and with diseases. For more on marine biosecurity, see Australian Panel of Experts on Environmental Law, *Marine and Coastal Issues* (Technical Paper 4, 2017).

Controlling established invasive plants and animals is largely a landholder and state or local government responsibility. Many invasive species spread naturally across boundaries. They can contaminate places even if people have been diligent in control, so long as there is a 'seed' population. Where there is an economic reason for landholders to control a species then management is more likely than when the harms are purely environmental. Regardless of private incentives, invasive species problems can be beyond the capacity of a landholder to control because of cost. Invasive animals pose particular challenges because many move easily and can adapt, and control typically involves lethal methods that give rise to animal welfare and political issues.

State legislation has traditionally created offences of harbouring or failing to control particularly harmful species, such as 'noxious' plants or animals, with different approaches and listings between states. The states have also taken different approaches to enforcement. Queensland, for example, places primary responsibility on local government, whereas NSW and Victoria focus prosecutorial responsibility on state agencies. Whilst prosecution is rare, warnings of potential prosecution have been widely used to encourage control of agriculturally harmful species. Variations between state approaches seem largely to reflect historical, political or cultural preferences, and generally there is far more attention paid to invasive species that affect human health or agricultural production than those that impact the environment. Because control of established species often requires action by landholders on private land and because of pressure on government budgets, the Commonwealth and many states are moving towards a general obligation on landholders to manage established pests under a general stewardship obligation, focusing government resources

69 See for example, Poh-Ling Tan, Kathleen Bowmer and John Mackenzie, 'Deliberative tools for meeting the challenges of water planning in Australia' (2012) 474 *Journal of Hydrology* 2.

70 Ibid; Cameron Holley and Darren Sinclair, 'Rethinking Australian water governance: successes, challenges and future directions' (2016) 33(4) *Environmental and Planning Law Journal* 275; G Syme and B Nancarrow, 'The social and cultural aspects of sustainable water use' in Lin Crase (ed), *Water Policy in Australia* (Resources for the Future, 2008).

71 See 'A Comparative Assessment of Existing Policies on Invasive Species in the EU Member States: Country Assessment, Australia' in Bio Intelligence Service for the European Commission, *A Comparative Assessment of Existing Policies on Invasive Species in EU Member States and in Selected OECD Countries* (16 September 2011). <http://ec.europa.eu/environment/nature/invasivealien/docs/IAS_policies_country_assessments2011.pdf>. (Note, this summary does not address disease and matters like legal controls on hunting, and the registration of poisons).

on prevention and early response.⁷² There are concerns about this approach to the management of established pests, unless investments and institutional reforms are implemented to strengthen landholder motivation and capacity.⁷³

Other apparently unrelated laws affect invasive species management. These include:

- animal welfare rules, which limit what control methods can be used.⁷⁴ Political action over animal welfare can limit invasive animal control, particularly affecting government agencies. One example is political opposition to the culling of feral horses.
- human health and safety laws affect invasive species management, through operator and poisons licensing and protocols, and restricting control methods in particular situations (for example, close to residences).⁷⁵
- the rules governing NRM programs (such as funding body requirements) affect invasive species management, which is often conducted as part of broader projects.
- rules that control hunting, on both private and public land.

The many criticisms of the legal and administrative regime for both new and established invasive species include concerns about an insufficiently precautionary approach to biosecurity, weak efforts to control harm to biodiversity where there is no harm to agriculture, the inability to ensure sufficient 'whole of landscape' control for problems that span land tenures, and legal and institutional failings. A consistent concern is that resources to respond to the increasing problems are chronically inadequate.⁷⁶

72 National Biosecurity Committee, 'Modernising Australia's approach to managing established pests and diseases of national significance: Discussion paper' (Department of Agriculture Forestry and Fisheries (Cth), July 2015); NSW Government, 'Proposed Framework for a NSW Biosecurity Act' (Department of Primary Industries (NSW), 2014) 46.

73 See Martin et al, above n 22.

74 For a listing of relevant laws see RSPCA, *What is the Australian Legislation Governing Animal Welfare?* (12 February 2016) <http://kb.rspca.org.au/What-is-the-Australian-legislation-governing-animal-welfare_264.html>; Trudy Sharp and Glen Saunders, 'A Model for Assessing the Relative Humaneness of Pest Animal Control Methods' (Department of Agriculture, Fisheries and Forestry (Cth), June 2011).

75 See for example, Australian Pesticides and Veterinary Medicines Authority, *Registration and use controls on chemicals* (Australian Government, 12 February 2016) <<http://apvma.gov.au>>.

76 See for example, Andrew Cox, 'Submission: Stopping New Invasive Species: Melbourne Australia' (Invasive Species Council, 10 September 2014); Martin et al, above n 22.

3. Critique of current arrangements

This part highlights four major concerns in the implementation of laws and programs: governance fragmentation; problems with development approval processes; gaps in management and evaluation information; and failures of implementation. These issues affect biodiversity protection generally and many can be extrapolated to environmental law as a whole. This paper uses examples from the key areas of biodiversity conservation, water governance and the management of invasive species as illustrations of the broader challenges.

3.1 Fragmentation of governance

A major problem is fragmented natural resource governance institutions. Even though the environmental effects of particular activities are cumulative and inter-related, sustainability is pursued through many agencies with distinct roles, strategies and governance arrangements. Having a federal government, six state legislatures, ten territories, and over 500 local government bodies, all pursuing different aspects of environmental management, has led to poorly coordinated rules, weak implementation and a lack of transparency about performance. There are many opportunities for confusion, problems in implementing technical rules, difficulties in communication, inflexibility and the risk that important issues may ‘fall between the cracks’.

Biodiversity conservation and the management of invasive species often require coordinated action across large areas, spanning public and private property tenures. Water governance must respond to diverse environmental, agricultural, mining and urban situations. Overlapping urban and industrial land uses, increasingly diverse farming, mining and gas extraction, ‘lifestyle’ activities, indigenous people’s land stewardship and public and private conservation together make it very difficult to achieve coordinated environmental management.

Land use planning is carried out by the states and territories, with local councils playing a major role. A specific approval is required for particular development proposals (see 2.2 below), but plans can also prohibit development and activities in particular areas (for example, where nature conservation is the priority). However, land use plans do little to manage existing activities (for example, industrial or agricultural activities); their focus is on regulating *development*.

Regulation of development through land use plans is framed by landholder expectations of a freedom to exploit their land as they see fit, constrained only when there is a specific public interest or competing private interest that must be accommodated. A common environmental criticism is that when nature conservation conflicts with development, particularly in urbanising areas, the latter take precedence in decisions on project approval.⁷⁷

The plans developed by natural resource management bodies such as the regional catchment management organisations in various states generally set priorities and develop strategies for persuading landholders to modify land uses that are harming biodiversity or other environmental values. These are not regulatory plans. They use persuasion and incentives to pursue their goals. These types of instrument are not integrated with regulatory land use plans.

The Commonwealth has powers to develop bioregional plans, but in practice this has been limited to marine planning.⁷⁸ Under the Commonwealth *EPBC Act*, bioregional plans are not restricted to dealing with environmental conservation, but can also address ‘important economic and social values’. A bioregional plan is not a regulatory instrument, but must be taken into account by the federal minister. The minister can also exempt actions/development from the need to obtain specific approval, if they are carried out in accordance with a bioregional plan.⁷⁹

Bioregional planning may be a way to reduce fragmented management, by creating a framework (or, if necessary, legal requirements) within which environmental, land use, social and other plans can be brought together into a

⁷⁷ David Farrier, ‘Biodiversity offsets and native vegetation clearance in New South Wales: The rural/urban divide in the pursuit of ecologically sustainable development’ (2007) 24(6) *Environmental and Planning Law Journal* 427.

⁷⁸ See Department of Environment (Cth), *Marine bioregional plans* (12 February 2016) <<http://www.environment.gov.au/marine/marine-bioregional-plans>>; for more on marine planning, see Australian Panel of Experts on Environmental Law, *Marine and Coastal Issues* (Technical Paper 4, 2017).

⁷⁹ *EPBC Act* ss 37, 37A.

unified system. Without trivialising the challenges of doing so, the use of bioregional planning, if well implemented, could provide more systemic protection of biodiversity and other values, provide greater clarity for land users and developers, and reduce the transaction costs of fragmentation. This idea is developed further in the next section of this paper, where specific reforms are proposed.

BOX 1: FRAGMENTATION AND WATER GOVERNANCE

The next few decades may see a 60% increase in Australia's population, coal and gas developments, doubling of Australia's food production (dependent on energy and water), and water scarcity due to droughts and climate change.⁸⁰ The *NWI* sought 'Integrated Management of Water for Environmental and Other Public Benefit Outcomes', but **water law and policy still struggle to address systemic connections such as between** water and energy/mining developments; water quantity and water quality; natural resource management; and land use planning.

Recent attempts to integrate mining, unconventional gas and other extractive industries through state and national reforms (for example, the 'water trigger') have been only partially successful.⁸¹ Remaining challenges include: developing a coordinated approach involving industry and multiple government agencies; water planning linked to gas project approval; accurate accounting of water takes; and implementing adaptive management as conditions of approvals.⁸²

Water quality has only been encompassed in minor ways by water law and policy reform. The *NWI* does not specify quality as a fundamental characteristic of water in planning or water rights arrangements.⁸³ In the Murray Darling Basin, quality issues are to be incorporated in water resource plans (by 2019) and a water quality and salinity management plan (WQSMP). There is increasing awareness of environmental flow impacts on ecosystem health and water quality,⁸⁴ but significant gaps remain in understanding the water quality needs of environmental assets. Where plans do include water quality objectives, limited attention has been given to issues other than salinity or diffuse nitrate pollutants.⁸⁵

Coordination between the *NWI* and other natural resource management is also insufficient. Partly funded under the National Action Plan for Salinity and Water Quality, the Natural Heritage Trust, Caring for our Country and now the National Landcare Programme, regional natural resource management bodies have an important role in managing landscape impacts on water quality. The *NWI* recognised their important complementary role in sustainable management of water, but this has not been translated into action.⁸⁶

Despite aspirations for integrated water and regional natural resource management plans nationally,⁸⁷ or at the state level (for example, reviews by the Natural Resources Commission in NSW), success has been limited.⁸⁸ Environmental objectives could be achieved more efficiently by coordinating water with other aspects of natural resource management. For example, protecting low flows to preserve

80 Wentworth Group of Concerned Scientists, above n 13.

81 National Water Commission, 'Water for Mining and Unconventional Gas', above n 65; National Water Commission, *Australia's Water Blueprint: National Reform Assessment* (Australian Government, 2014) 10.

82 National Water Commission, 'Water for Mining and Unconventional Gas', above n 65.

83 National Water Commission, *Australia's Water Blueprint*, above n 81, 132.

84 See also Standing Council on Environment and Water, 'Next Steps in National Water Reform: Preparation for the Future' (Council of Australian Governments, 2013).

85 National Water Commission, *Australia's Water Blueprint*, above n 81, 132.

86 *Intergovernmental Agreement on a National Water Initiative* above n 61.

87 National Water Commission, *Australia's Water Blueprint*, above n 81, 19.

88 See for example, Natural Resource Commission, *2015 Water Sharing Plan Reviews* (2015) <<http://www.nrc.nsw.gov.au/2015-wsp-reviews>>.

in-stream habitat could fail if the impacts of cattle or sheep are not well-managed. Cost-effective options for achieving the environmental objectives of water allocation plans may be missed if on-ground natural resource management and water regimes are not integrated.⁸⁹

There is a lack of integration between water and land use planning. Integrated catchment management goals have been deferred under the pressure to deal with over-allocation and volumetric sustainability.⁹⁰ However, changing land uses (for example, hobby farms and the increasing number of dams) have the potential to affect water quality and volumes.⁹¹ Decisions on water availability have significant consequences for communities that rely on irrigation, and will shape future land use and have urban planning considerations.⁹² Ensuring effective and efficient management of land use and water systems requires that they be managed as closely coupled systems.⁹³

3.2 The limitations of EIA and development approval processes

The principal legal instrument for controlling development is the requirement for developers to obtain prior approval and to comply with approval conditions. Underpinning this traditional regulatory approach is a historical centerpiece of state and federal environmental laws - EIA and decision-making guided by statutory criteria.⁹⁴ Under the *EPBC Act*, Commonwealth approval is only required where a proposed development is likely to have a significant impact on MNES.⁹⁵ The principles of ESD, including the precautionary principle must be considered when making decisions.⁹⁶

The project-by-project approach to protecting listed species or safeguarding environmental quality has deficiencies. It does not deal with the cumulative effects of activities and does not deal adequately with uncertainty about populations, impacts, and future stressors. Other problems with front-end EIA processes include claims of pro-development bias and failures to monitor and enforce compliance with approval conditions intended to control social or environmental harm.

3.2.1 Cumulative impacts

There is no legal mechanism ensuring that the cumulative impacts of separate development approvals are taken into account. This has been a major issue in expanding CSG development, but this is only the latest illustration of the ongoing problem. Despite increased strategic planning at state levels and scope under the *EPBC Act*'s 'water trigger', federal assessment of projects does not account for cumulative impacts of CSG development on groundwater

⁸⁹ National Water Commission, above n 12, 4.

⁹⁰ Tan, Bowmer and Mackenzie, above n 69, 2 and 8.

⁹¹ National Water Commission, *Australia's Water Blueprint*, above n 81.

⁹² Tan, Bowmer and Mackenzie, above n 69, 8; see also Anthony Keim, 'Drought and Water Policy in Australia: Challenges for the future illustrated by the issues associated with water trading and climate change adaptation in the Murray-Darling Basin' (2013) 23(6) *Global Environmental Change*, 1615.

⁹³ Keim, above n 92; Wentworth Group of Concerned Scientists, above n 13.

⁹⁴ See for example, *EPBC Act* s 66.

⁹⁵ *Ibid* ss 82, 527E.

⁹⁶ *Ibid* ss 130, 133, 136-140A, 391. Note that there are some exceptions to actions that require approval. For example, if the action is undertaken in accordance with the *Great Barrier Reef Marine Park Act 1975* (Cth): *EPBC Act* s 43. For further exceptions see *EPBC Act* ss 29-32, 32, 38-42, 159-164; Johnson, above n 40; Bates above n 37, 146-147.

resources and groundwater dependent communities.⁹⁷ The Australian Government is undertaking strategic assessments under Part 10 of the *EPBC Act* to better understand the potential impacts of CSG and large coal mining developments. While this is a step in the right direction, it is in its initial phases, and does not reflect the need for a change in the law and practice of EIA to account for cumulative impacts.⁹⁸ Bioregional planning has the potential to fill this significant gap, forming the basis of comprehensive plans which integrate ecological, economic and social criteria for land development and land use adaptation.

3.2.2 Accommodating uncertainty and change

Natural systems constantly change. This dynamism will increase with climate change. Traditional legal approaches focus on protection and restoration of existing systems and assume that ecosystems are stable and should be managed for their current values. The focus of nature conservation policy and law is thus ‘preservationism’,⁹⁹ aiming to maintain species in their present locations and ecosystems with their present composition, or in some cases returning conditions to historical baselines.

Climate change is likely to exacerbate stressors such as resource extraction or exploitation, land clearing, pollution and invasive species. Changes in rainfall patterns will mean greater scarcity in some places, and more variability. If biodiversity and other natural values are to be protected it is essential that laws facilitate adjustment to address changing circumstances. The objectives of the *EPBC Act* do not specify the need to respond to the impact of climate change on biodiversity, although this should be implicit in a commitment to protect species and ecosystems.¹⁰⁰

3.2.3 Market instruments including biodiversity offsets

Market instruments and ‘market-like’ mechanisms are increasingly important in environmental management, as is illustrated with water rights. Whilst these are important innovations for which there is a great deal of enthusiasm in some quarters, the risks and problems are not well understood and managed. Some of the issues are demonstrated by the discussion of water management. Other challenges are illustrated by the growing use of biodiversity offsets and new legal interests in land, which have the potential to complicate property transactions and land management.

Biodiversity offsets are intended to compensate for the remaining impacts of an approved project after measures to avoid or mitigate impacts have been exhausted. They may be required as a condition of approval under the *EPBC Act* and project development or planning legislation in most states. Offsets are not specifically addressed in the *EPBC Act*. Relevant provisions are found in the *EPBC Act Offsets Policy* which requires that offsets ‘directly contribute to the ongoing viability of the protected matter impacted by the proposed action, and deliver an overall conservation outcome that *improves or maintains* the viability of the protected matter as compared to what is likely to have occurred under the status quo, that is if neither the action nor the offset had taken place’.¹⁰¹ Offsets are designed, over the long term, to ensure that there is no net loss as management actions on the offset site replace biodiversity values lost on the development site. The intention is that the status quo is maintained, although under the Commonwealth policy up to 10% of an offset can be indirect (for example, funding research on the natural values damaged by the development).

97 Emma Carmody and Kirsty Ruddock, ‘Coal seam gas and water resources: a case for Commonwealth oversight?’ (2013) 28(3) *Australian Environment Review* 501; Poh-Ling Tan, David George and Marla Comino, ‘Cumulative risk management, coal seam gas, sustainable water, and agriculture in Australia’ (2015) 31(4) *International Journal of Water Resources Development* 2.

98 Further, projects with existing approvals are to be undertaken in accordance with the conditions attached to that approval only, and any subsequent Part 10 strategic assessment under the *EPBC Act* will not apply even if the action is yet to commence; Damian Barrett et al, ‘Methodology for bioregional assessments of the impacts of coal seam gas and coal mining development on water resources’ (Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development through the Department of the Environment, 2013); see generally Department of the Environment, above n 68.

99 Benjamin Ruhl, ‘Climate Change Adaptation and the Structural Transformation of Environmental Law’ (2010) 40 *Environmental Law* 363, 392-397.

100 *EPBC Act* s 3(2)(e).

101 Department of Sustainability, Environment, Water, Population and Communities (Cth), ‘*Environment Protection and Biodiversity Conservation Act 1999* Environmental Offsets Policy’ (October 2012) 8.

One justification for offsets is that they create a price for habitat loss, which should promote protection.¹⁰² The risks include: (1) the impossibility of achieving ‘like for like’ offsetting; (2) offsets entrenching rather than reversing downward trajectories; and (3) the focus on economic efficiency while discounting social considerations, including fairness.¹⁰³ Practical problems include: using offsets without first seeking to avoid or minimise loss to the maximum possible extent; failure to establish ‘red flag’ or ‘no go’ areas where offsets cannot be used; approving projects or allowing an activity to commence before offsets have been secured; poor success rates of restoration activities; failure to monitor offset implementation and effectiveness; and lack of long-term security afforded to offset sites.¹⁰⁴

Seeking ‘like-for-like’ replacement of natural values (ecological equivalence) is often seen as an essential part of offsetting.¹⁰⁵ However, *status quo* replacement for damaged habitats is questionable, because many existing associations of plant species will not be sustainable under a changed climate. Some offset schemes have considered the need for flexibility to ensure sustainability, abandoning attempts at ‘like-for-like’ replacement of natural values in some circumstances. Under South Australian legislation,¹⁰⁶ for example, offsets must provide an overall ‘significant environmental benefit’, such as by establishing or managing vegetation or fencing off land. Where this is not possible, then a payment can be made to the Native Vegetation Fund. The only requirement is that these funds are spent on conserving vegetation ‘within the same region’. Even this requirement can be bypassed, for example, where a greater environmental benefit is expected by investing in threatened species or communities in another region.¹⁰⁷

The next section of this *Technical Paper* does not make specific recommendations on the subject of market mechanisms generally or the specific tool of biodiversity offsets. However, the discussion in the present section emphasises the need for greater caution in their use given the risks and concerns that have been discussed.

3.3 Inadequacies in monitoring, evaluation and reporting

Monitoring provides essential information to regulators, legislators, industry, and the public about the condition of ecosystems, species abundance and location, and the volume and quality of water.¹⁰⁸ This helps legislators to hold regulators accountable; regulators to improve regulatory programs and markets; industry to manage their obligations; and the public to make decisions about environmental risks and about the effectiveness of governance.¹⁰⁹ Good monitoring is essential to ensure that resource, environmental and water laws and policies adapt.¹¹⁰ However Australia’s environmental data infrastructures are under-developed, which severely constrains the ability of Australian governments to develop and enact evidence-based environmental policy.¹¹¹

Reliable monitoring will be increasingly important as climate change impacts on the environment, exacerbates drought¹¹² and produces more variability.¹¹³ As part of Australia’s *Biodiversity Conservation Strategy 2010-2050*, the Australian Natural Resource Management Ministerial Council committed to a national long-term biodiversity monitoring and reporting system by 2015.¹¹⁴ A review by Humane Society International in March 2015¹¹⁵ found that good progress had been made in achieving this target, with government funding for the Terrestrial Ecosystem Research Network (TERN), a collaboration of universities and state/territory and Commonwealth agencies. A recent TERN newsletter reflected optimism about long-term support following a National Science and Innovation Agenda.¹¹⁶

102 Sarah Bekessey et al, ‘Policy Perspective: The Biodiversity Bank Cannot be a Lending Bank’ (2010) 3 *Conservation Letters* 151, 152.

103 Ibid.

104 Martin Fallding ‘Biodiversity offsets: Practice and promise’ (2014) 31 *Environmental and Planning Law Journal* 11, 19-20.

105 Rachel Walmsley et al ‘Fundamental Principles for Best Practice Biodiversity Offsets’ (2014) *Impact* 96; Senate Environment and Communications References Committee (Cth), ‘Environmental offsets’ (Commonwealth of Australia, 2014), ch 3.

106 *Native Vegetation Act 1991* (SA) ss 28, 29(1)(d), 21(6), (6a).

107 See also NSW Office of Environment and Heritage, *NSW Biodiversity Offsets Policy for Major Projects* (2014) <<http://www.environment.nsw.gov.au/biodivoffsets/biooffsetspol.htm>>.

108 Eric Biber, ‘The problem of environmental monitoring’ (2011) 83(1) *University of Colorado Law Review* 5.

109 Ibid.

110 Ibid.

111 State of the Environment 2011 Committee, above n 9, 2.

112 Steffen, above n 13.

113 Ian Neave et al, ‘Managing water in the Murray-Darling Basin under a variable and changing climate’ (2015) 42(2) *Water Journal* 102, 106.

114 State of the Environment 2011 Committee, above n 9, 581.

115 Humane Society International ‘Australia’s Biodiversity Conservation Strategy 2010-2030: An Independent Review of Progress’ (April 2015) 45-47.

116 Terrestrial Ecosystem Research network, *Director’s update* (December 2015) <<http://www.tern.org.au/Newsletter-2015-Dec-Directors-Update-pg31218.html>>.

Monitoring and evaluation for water management has often proven inadequate to determine sustainable water allocations and the achievement of environmental objectives.¹¹⁷ Despite significant investment, deficiencies in information infrastructure adversely affect decision-making, especially about environmental watering.¹¹⁸ The Improving Water Information Program and the Bureau of Meteorology have made substantial progress in water information (for example, water storage information, water accounts, stream flow forecasts, market information and water resource assessments).¹¹⁹ However, adequate coverage and completeness is still not assured.¹²⁰

Deterioration in the monitoring network and uncertainty over funding beyond 2016 raise serious concerns.¹²¹ The accuracy of meters measuring water extraction is unreliable because of the age of the infrastructure, inadequate maintenance or poor installation.¹²² Even given efforts to improve this, the use of telemetry (sending of metered data wirelessly to a database that can be accessed remotely) is limited. Without telemetered data, market information and transparency will be less than optimal, and self-monitoring of compliance may be discouraged.¹²³

Monitoring and intelligence deficiencies exist for most aspects of environmental governance. As was highlighted in the Australian 2011 *State of the Environment Report*,¹²⁴ without sound management data it is not possible to manage many environmental issues reliably, and it is not possible to ensure transparent evaluation of the performance of the environmental governance laws and other arrangements.

3.4 Implementation deficits

Laws and other governance arrangements are only as good as their implementation. There are many deficiencies in the implementation of conservation and NRM law, resulting in the failure to achieve ecological and social outcomes.¹²⁵ Implementation requires many actions by many people and organisations, and it will not happen without sufficient resources. Some examples serve to illustrate the larger problem.

Implementing the *Basin Plan* and its Water Resource Plans involves many changes to integrate connectivity between groundwater and surface water and to re-engage with communities who feel marginalised by the reforms, plus it requires substantial investment by both citizens and governments.¹²⁶ Over-allocation persists in many catchments. The achievement of indigenous peoples' objectives for water rights and effective participation in water management is a further illustration of implementation failure.¹²⁷ As of 2014, there had been no substantial increase in water allocations for indigenous purposes - social, economic or cultural since 2010.¹²⁸

A further implementation concern is the abolition of the NWC. The NWC played a key role in the accountability of governments and government-owned enterprises, and provided a strong impetus for implementation and innovation. Commissioners provided a skills-based national perspective that was not likely to be obscured by immediate interests.¹²⁹ With its loss, governments are left to self-assess and self-report. This reduces transparency and compromises the comparison of performance between states. This lack of an independent body to drive innovation and accountability is a significant concern not only in relation to water. It is a further illustration of a lack of Australian

117 National Water Commission, *Australia's Water Blueprint*, above n 81, 82.

118 Ibid 116.

119 *Water Act 2007* (Cth) pt 7; Australian National Audit Office, 'Administration of the Improving Water Information Program' (Audit Report No.18, *Administration of the Improving Water Information Program*, 2013-14); *Australia's Water Blueprint*, above n 81.

120 Australian National Audit Office, above n 119; National Water Commission, *Australia's Water Blueprint*, above n 81.

121 National Water Commission, *Australia's Water Blueprint*, above n 81.

122 Department of the Environment, Water Heritage and the Arts (Cth), 'National Framework for Non-urban Water Metering Regulatory Impact Statement' (2009); Ann Hamblin, 'Policy Directions for Agricultural Land Use in Australia and other Post-industrial Economies' (2009) 26(4) *Land Use Policy*, 1195, 1198.

123 Cameron Holley and Darren Sinclair, 'Governing water markets - achievements, limitations and the need for regulatory reform' (2016) 33(4) *Environmental and Planning Law Journal* 301; Clare McKay and Alex Gardner, 'Water accounting information and confidentiality in Australia' (2013) 41(1) *Federal Law Review* 127; Department of Environment (Cth), 'National Framework on Non-Urban Water Metering: Policy Paper' (7 December 2009).

124 State of the Environment 2011 Committee, above n 9, 2, 343, 649, 656.

125 See IUCN, *Law for sustainability* (12 February 2016) <<http://www.lawforsustainability.org>>, with Australian case studies of the implementation of the precautionary principle in relation to the white shark, and participatory requirements in relation to market-protected areas.

126 See for example, Poh-Ling Tan et al, 'Water planning in the Condamine Alluvium, Queensland: Sharing information and eliciting views in a context of overallocation' (2012) 474 *Journal of Hydrology*, 38.

127 National Water Commission, *Australia's Water Blueprint*, above n 81, 4.

128 National Water Commission, *A review of Indigenous involvement in water planning*, 2013 (2014) 5.

129 National Water Commission, *Australia's Water Blueprint*, above n 81, 108.

mechanisms to ensure implementation of environmental governance arrangements, and to ensure that there is transparent evaluation of the effectiveness of legal and market instruments and public policies.

Problems implementing national biodiversity policy are illustrated by the gaps in the NRS. The NRS covers 17% of Australia's land, up from 9.5% in 2002, with highly protected areas, such as national parks, covering over 8.5%. The increase is largely attributable to the growth in IPAs,¹³⁰ but there is a need to ensure sufficient resources and capacity for indigenous communities who are expected to be the stewards of this vital part of the reserve system.¹³¹ Despite the increased coverage, the NRS is far from complete with under-representation of bioregions in the central and parts of western NSW, and significant gaps at the sub-bioregional level across the country.¹³² The World Wide Fund for Nature (WWF) has calculated that 1,655 of 5,815 terrestrial ecosystems have no representation in the NRS. Over 2000 are less than halfway towards meeting WWF's target of 15% of pre-clearing extent. As of 2012, reservation of an additional 57 million hectares was needed if all ecosystems were to satisfy the 15% target. In some cases, filling the gaps would require protection of all the remaining uncleared areas, regeneration of other areas, and possibly replanting.¹³³

The NRS does not adequately protect Commonwealth listed species. In 2010, over 12% of threatened species were not found in the NRS, including 21% of critically endangered species. Target levels of geographic range protection (1000 sq kms or 100% of the range of the species, whichever was smaller, or 10% of the range where it exceeded 10,000kms) were met for less than 20% of species, meaning that over 80% were not adequately protected. Even where a species is found in a protected area, it may lack effective protection. Over 48% per cent of the NRS consists of IUCN categories V and VI, which may allow grazing and mining to threaten many species.¹³⁴

The NRS can be criticised for not adequately providing for climate change refugia or conservation connectivity across the landscape. Refugia are areas that species can retreat to, persist in and potentially expand from under changing climate conditions. Recent assessments suggest that only 14% of identified climate refugia fall within the existing NRS.¹³⁵

In relation to invasive species management, there are concerns that preventative biosecurity is insufficiently precautionary, insufficiently coordinated and under-resourced.¹³⁶ The control of established species is plagued by institutional problems, including the inability to effectively require and resource legally required controls of declared agricultural pests, failures to achieve comprehensive and coordinated control at a sufficient landscape-scale to be effective, legal and institutional impediments to frontline action, and chronic under-resourcing of all aspects of management.¹³⁷

130 MFJ Taylor, J Fitzsimons and P Sattler, *Building Nature's Safety Net 2014: A decade of protected area achievements in Australia* (WWF-Australia, 2014) 56.

131 H. Moorcroft et al, 'Conservation planning in a cross-cultural context: the Wunambal Gaambera Healthy Country Project in the Kimberley, Western Australia' (2012) 13(1) *Ecological Management & Restoration* 16.

132 Office of the Environment and Heritage, 'Biodiversity Legislation Review OEH Paper 3: Conservation Action' (2014) 20.

133 Taylor, Fitzsimons and Sattler, above n 130; see the pie chart on the extent of achievement of the 15% target in relation to all ecosystems at page 63. The maps at page 64 show that on the east coast the standard is reached across many ecosystems, but not inland.

134 Department of Environment (Cth), *Protected area locations* (12 February 2016) <<http://www.environment.gov.au/land/nrs/science/protected-area-locations-cat>>; J E M Watson et al, 'The Capacity of Australia's Protected-Area System to Represent Threatened Species' (2010) 25(2) *Conservation Biology* 324; Vanessa Adams and Katie Moon, 'Security and equity of conservation covenants: Contradictions of private protected area policies in Australia' (2013) 30 *Land Use and Policy* 114.

135 April Reside et al, 'Climate change refugia for terrestrial biodiversity: Defining areas that promote species persistence and ecosystem resilience in the face of global climate change' (National Climate Change Adaptation Research Facility, 2012) 216 [3.4.8].

136 Roger Beale et al, 'One Biosecurity: The Independent Review of Australia's Quarantine and Biosecurity Arrangements' (Report to the Australian Government; 2008); A Cox, Submission No 74 to Senate Standing Committee on Environment and Communications, *Inquiry into Environmental Biosecurity*, 10 September 2014.

137 Martin and Williams, above n 1; Martin et al, above n 22.

4. Reform

Stemming Australia's rate of environmental harm requires strong mechanisms to ensure individual and corporate accountability and motivation. It also requires investment to ensure good stewardship. While more coherent national environmental laws are needed to better manage biodiversity, water, and invasive species, legal instruments alone cannot overcome the insufficiency of resources, limits to government power, and community norms that limit the effectiveness of legal arrangements.

4.1 Challenges

Significant barriers to more effective environmental governance must be overcome to achieve enduring improvement. Some of these pervade all of Australia's attempts to create a more effective, efficient and fair national system of environmental stewardship on behalf of future generations. There are two fundamental challenges: managing the tension between private rights to exploit nature and the public interest in the sustainable use of nature, and the fundamental problem of finding sufficient resources for effective stewardship.

4.1.1 Public interests and private property

The tension between private freedom to exploit property and the public interest in limiting this freedom to satisfy broader social interests has deep historical roots. The boundaries between private and public rights are constantly evolving, as social conditions change and, in particular, as the inter-dependency of interests in society become greater with population growth and demands on nature. These boundaries will continue to change. Changing circumstances lead to different pressures, and thus to changes in the legal treatment of private property.¹³⁸

The common law does not give private landholders absolute rights over their land. The common law of nuisance has long recognised the need for restrictions on land use to protect private landholders from each other. The early common law riparian doctrine managed landholder impacts on other riparian users by imposing requirements of reasonableness when using water. It has always been possible for governments to adjust rights to use privately owned land to ensure responsible use and to protect the public interest, though regulation can cause political disputes. Legislation has imposed land use controls and made some actions on privately owned land illegal (for example, growing illegal crops and clearing native vegetation). In practice, however, the Australian tradition is to protect some private rights. In particular, legislation that restricts development, including land use planning and biodiversity legislation, usually exempts existing uses of land on the basis of fairness.¹³⁹

The Australian government has powers to regulate the use of land and water; for example through legislation such as the *EPBC Act*, notwithstanding private ownership.¹⁴⁰ The *Australian Constitution* requires that the Commonwealth pay compensation on just terms only when acquiring property.¹⁴¹ The circumstances under which this applies are very limited, because good governance often requires that private property be used in a way that is consistent with the public interest.¹⁴² Simply regulating the use of land - without acquiring any interest in the property - does not require compensation, even when the restrictions are significant.¹⁴³

Most land use planning and water regulation occurs at the state and territory level, where there is no constitutional requirement for compensation. Consistent with common law traditions, state governments do not have an obligation to provide compensation where land use regulation affects private land use.¹⁴⁴ In practice, state governments generally

138 Australian Law Reform Commission, *Traditional Rights and Freedoms—Encroachments by Commonwealth Laws*, Interim Report No 127 (2015) ch 8.

139 For example, *EPBC Act* s 43B.

140 Sangeetha Pillai and George Williams, 'Commonwealth Power and environmental management: Constitutional questions revisited' (2015) 32 *Environment Planning and Law Journal* 405.

141 *Australian Constitution* s 51(xxxi); these obligations are reiterated in many federal statutes.

142 *Newcrest Mining (WA) Ltd v Commonwealth* (1997) 147 ALR 42.

143 *Spencer v Commonwealth of Australia* [2015] FCA 754.

144 Sangeetha Pillai and George Williams, above n 140, 405.

provide compensation for land acquisition (typically there will be a statutory duty to do so), and occasionally for land use restrictions where the specific legislation prescribes such payments.

This paper does not propose specific recommendations concerning this matter, as the treatment of this balance will continue to evolve under the supervision of the courts, to meet changing circumstances. Section 51(xxxi) of the *Australian Constitution* is discussed in the Australian Panel of Experts on Environmental Law, *Environmental Governance* (Technical Paper 2, 2017).

4.1.2 Funding sustainability

Australian policy makers often prefer to use incentives rather than regulation, but their ability to use payments is limited by what funds are available. In particular, where it is necessary for landholders to carry out active management to ensure sustainability, the preference is to encourage this as good citizenship, supported by limited financial support or by the use of private markets.

The benefits of good environmental governance are immense, but the expenditure needed to achieve this is substantial. Reliable data on what amounts are actually spent by the public or the private sector in this area are not available. Estimates of what investment is needed to ensure sustainable resource use depends on contestable assumptions about the desirable state of the environment and how this might be achieved.¹⁴⁵ It has been estimated (subject to many assumptions) that an amount roughly equivalent to the national expenditure on defence is required for landscape protection and restoration. Only a fraction of what is required is being invested.¹⁴⁶ An international study found that Australia was substantially underfunding biodiversity conservation.¹⁴⁷ Average annual spending in Australia was estimated to be \$US526.113 million, ranking Australia among the 40 most underfunded countries. The model indicated that Australia's investment is falling short by approximately \$US275.36 million per annum. This is probably a conservative estimate of the funding gap.

Funds are essential to motivate and enable environmental stewardship; pay for technical support and training; fund labour and materials; and support research and measurement. 'Science-informed' environmental regulation also implies investment in obtaining the necessary data. Insufficient investment in the required science affects, for example, implementation of the protection of endangered species under the *EPBC Act*, including attempts to use scientifically rigorous methods to manage land-clearing. Another illustration is the cost of the science needed to properly manage aquifers or the Murray-Darling river system.

Regulation can also impose costs on people who lack the capacity to pay; market instruments can increase the costs for struggling enterprises; and even voluntary work imposes costs on those who volunteer that are not shared by the general public. Resourcing difficulties limit the effectiveness of environmental laws, and can generate perceptions of unfairness, contributing to resistance to environmental protection.

The Commonwealth Government's current budget on NRM is estimated to be \$2 billion over four years, split between the National Landcare Programme No 2, the Green Army, Working on Country, the Land Sector Package, the *Reef 2050 Plan*, the Great Barrier Reef Foundation, and the *Whale and Dolphin Protection Plan*. Non-grant government costs include indirect expenditures such as research and development, planning, administration, political negotiation, regulatory or market-trade infrastructures, participating in markets and measuring, monitoring and evaluation. Unaccounted expenses include coordination between government agencies that have overlapping roles and between government and citizens.

Much of the federal front-line investment is delivered via collaborative projects with co-funding from the states and territories, from industry and from landholders and citizen groups. The federal government also makes specific

¹⁴⁵ For a detailed analysis see Kip Werren, *Utilising Taxation Incentives to Promote Private Sector Funded Conservation*, (PhD Thesis, University of Western Sydney, 2015). See also Australian Panel of Experts on Environmental Law, *The Private Sector, Business Law and Environmental Performance* (Technical Paper 7, 2017) for more information on the role of the private sector.

¹⁴⁶ Paul Martin and Kip Werren, 'Discussion paper: An industry plan for the Victorian environment?' (Department of Sustainability and Environment (Vic) 2009).

¹⁴⁷ Anthony Waldron et al, 'Targeting Global Conservation Funding to Limit Immediate Biodiversity Declines' (2013) 110 *Proceedings of the National Academy of Sciences of the United States of America* 12144.

purpose payments to support state and territory environmental investments (much of it for infrastructure such as water and sewerage systems), but reporting complexities make it impossible to determine how much funding arrives 'at the front line' of sustainability investment.

State, territory, and local governments contribute substantially to the management of public lands, bushfire mitigation, waste management, water management, environmental research and development, biodiversity programs, and environmental policies.

Governments are increasingly reluctant to commit to conservation funding, in part because of fiscal difficulties.¹⁴⁸ As government budgets shrink, public agencies reduce their investment in administration and enforcement, and industry is always pressing to reduce legal complexity.

Government is however, only a small part of the investment story. Private landholders, businesses, communities, indigenous Australians, and non-government organisations significantly invest in NRM, with much of this investment being unaccounted for. This includes expenditures for compliance with regulation; private restraint (for example, 'green consumerism' and voluntary conservation areas); philanthropy and other volunteer activity; private stewardship; industry initiatives such as 'chain of responsibility' management or voluntary environmental reporting; environmental codes and standards; and citizen activism for the environment.¹⁴⁹ It is often suggested that a greater use of market instruments could narrow the funding gap for strategies to achieve national sustainability objectives, but if it is assumed that government will be the buyer of services, the constraints on public investment make such proposals questionable. Far more private funds, probably from diverse sources, will be needed.

4.2 Reform proposals

In earlier times, NRM law was concerned with managing harms that generally had easily identified causes and effects, using straightforward regulatory approaches. The examples of biodiversity conservation, water governance and the management of invasive species have demonstrated that modern legal arrangements must deal with far more complex issues, and involve more complicated governance instruments. Fixing problems of regulatory fragmentation, poor coordination, and case-specific decision-making requires integrated approaches, at various spatial scales. The analysis also highlights that law reform needs to take place within a framework that includes initiatives such as the encouragement of voluntary stewardship, and the funding of sustainability. Among the options for reform are the wider use of bioregional planning as the basis for more strategic decision-making, better national coordination of the management of high priority environmental issues, and the development of a national investment strategy for the environment.

From among many possibilities, this *Technical Paper* identifies six priorities for reform. These are: (1) coordinated bioregional planning and management, including coordinated responses to major issues; (2) completion of the NRS so that a representative sample of all ecosystem types is conserved; (3) monitoring, evaluation and reporting of biophysical conditions to ensure transparency and support continuous improvement; (4) legal arrangements that enable adaptation, particularly given the contingencies of climate change; (5) a funding strategy to ensure resources for implementation; and (6) a stronger role for indigenous communities in biodiversity conservation and NRM. These proposals are interwoven, together constituting systemic reform of natural resource governance laws and related institutions.

¹⁴⁸ The Treasury '2015 Intergenerational Report' (Australian Government, 5 March 2015).

¹⁴⁹ See for example, Australian Bureau of Statistics, *4620.0 - Natural Resource Management on Australian Farms, 2006-07* (25 June 2008) <<http://www.abs.gov.au/ausstats/abs@.nsf/mf/4620.0>>. Further indications are provided by the Australian Environmental-Economic Accounts 2015 'experimental' supply estimates of environmental services by industry and product for 2010-11, but the data do not provide information on investments in biodiversity, water and invasive species management expenditures.

4.2.1 Bioregional plans

An integrated strategic planning approach is needed to meet anticipated challenges. A bioregional planning process led by the Commonwealth and drawing on Commonwealth powers, working collaboratively with the states, local government and communities, could provide this. The coordinating structure used for the Murray Darling *Basin Plan* suggests a possible approach. Holistic regional planning could ensure that activities on one parcel of land do not undermine conservation or restoration undertaken on others, taking a landscape-scale approach to land management. The Hawke Review of the *EPBC Act* advocated this type of bioregional planning. Landscape-scale planning could determine areas for conservation as well as the areas most suitable for development, and provide a framework for managing cumulative impacts.¹⁵⁰ A properly implemented approach would protect ecological integrity, whilst ensuring that economic uses are located in the most appropriate places.

Effective bioregional plans should provide a framework to respond to stressors, including climate change, and help to determine areas to be included in the NRS under the Comprehensive, Adequate, and Representative (CAR) principles. This approach would also assist in planning connectivity linkages and buffers to be implemented through conservation agreements negotiated with landholders.¹⁵¹ Land use would need to be adaptive over time, for example in response to shifts in the ranges of species requiring protection.¹⁵²

Bioregional planning would also support landscape-scale invasive species management. Control of many invasive species requires a sustained programme across a sufficiently large area of landscape, overcoming the limitations imposed by individual tenure and diverse land manager motivations. It could also provide a framework for more integrated water and land use management, discussed above at 2.1.

Many issues need to be addressed in designing a bioregional approach, so consultation is essential. Among the questions are: what issues should be part of the bioregional planning approach? What matters need to be nationally coordinated, and what should be regionally adaptive? What should be the roles and responsibilities of the Commonwealth, states and local government in bioregional planning?¹⁵³ How should communities and industry be involved, and how is effective engagement with key stakeholders, such as indigenous communities to be achieved? What should be the balance between regulation and incentives? What safeguards should there be for the quality and integrity of plans and their implementation? Though implementation of bioregional planning will be complicated, comprehensive bioregional management could help overcome important failings of current natural resource governance.

RECOMMENDATION 3.1

The Commonwealth should ensure integrated resource governance, by undertaking landscape-scale planning at appropriate bioregional scales and establishing nationally coordinated frameworks for the implementation of bio-regional plans. This will require a consistent hierarchy of rules, roles and responsibilities.

150 See Commonwealth of Australia, 'The Australian Environment Act – Report of the Independent Review of the Environment Protection and Biodiversity Conservation Act 1999' (Hawke Report Department of Environment, Water, Heritage and the Arts, 2009) [3.17].

151 Taylor, Fitzsimons and Sattler, above n 130, 10.

152 L Hannah and L A Hansen, 'Designing landscapes and seascapes for change' - in T E Lovejoy and L Hannah (eds), *Climate change and biodiversity* (Yale University Press, 2005) 329.

153 Note that this particular issue is addressed in considerable detail in Australian Panel of Experts on Environmental Law, *Environmental Governance* (Technical Paper 2, 2017), which calls for greater strategic leadership by the Commonwealth in the development of national strategic environmental instruments, including regional instruments that involve landscape-scale plans at appropriate bioregional scales (see Recommendations 1 and 3 of that Paper).

4.2.2 Completion of the National Reserve System (NRS)

As the backbone of the conservation regime in Australia, the NRS should be completed and its status formalised. The NRS is established under national policies, funding arrangements, contractual agreements and state and territory laws. It is not yet underpinned by a national legal instrument. This could be achieved by amendment to the *EPBC Act*. As discussed in 3.2.1, the NRS would be a key component of bioregional plans. Consistent with the call in Australian Panel of Experts on Environmental Law, *Environmental Governance* (Technical Paper 2, 2017) for greater strategic leadership by the Commonwealth on environmental matters, it should take the initiative in working with the states to ensure completion of the NRS.

High ecological values identified for incorporation in the NRS should be assigned an IUCN protected area category (Categories Ia-VI) to ensure that the environmental status of areas is specified. IUCN categories range along a continuum. At one extreme are highly protected areas, such as wilderness areas and national parks. At the other, Category VI allows low-level non-industrial and sustainable use of natural resources compatible with nature conservation in part of the area. A nationally consistent and transparent process and set of standards for IUCN categorisation and the auditing of management effectiveness needs to be established.¹⁵⁴

There are opportunities to extend the NRS through the inclusion of further IPAs on land and in the offshore. Any inclusion of these IPAs should occur with the consent of the relevant communities and be supported by adequate funding and capacity building to develop culturally appropriate environmental governance practices.

RECOMMENDATION 3.2

The Commonwealth should ensure completion of the National Reserve System (NRS), to provide legal protection for the full range of ecosystems within bioregions and subregions.¹⁵⁵ Related steps are needed to safeguard climate refugia and ensure connectivity across the landscape.

4.2.3 Effective monitoring, evaluation and reporting

Many studies highlight that better information is essential for effective natural resource governance, to help manage environmental issues and to ensure transparent evaluation of the effectiveness of governance. As environmental variability increases due to climate change, decision-making will need to respond to dynamism and uncertainty.¹⁵⁶ This will require better monitoring of ecological baselines and the effectiveness of environmental management actions.¹⁵⁷

National *State of Environment* reports are irregular. They do not directly evaluate the performance of governance arrangements, but could do so. Ensuring that independent *State of Environment* reporting does evaluate and report on the effectiveness of natural resource governance arrangements is likely to increase transparency and encourage improved governance.

¹⁵⁴ Taylor, Fitzsimons and Sattler, above n 130, 50.

¹⁵⁵ Much of the necessary additions to the NRS will need to be made by the states, however the Commonwealth can play a significant role in securing state action through financial assistance and targeted disincentives (see also Australian Panel of Experts on Environmental Law, *Environmental Governance* (Technical Paper 2, 2017)).

¹⁵⁶ Robyn Craig, 'Stationarity is Dead' – Long Live Transformation: Five Principles for Climate Change Adaptation Law' (2010) 34 *Harvard Environmental Law Review* 9, 65.

¹⁵⁷ J B Ruhl, 'Climate Change Adaptation and the Structural Transformation of Environmental Law' (2010) 40 *Environmental Law* 392-397, 420.

Other necessary improvements to monitoring, reporting and evaluation include:

- specifying in legislation and inter-government agreements what information should be collected and reported to monitor the effectiveness of governance;¹⁵⁸
- requiring government agencies to share data and publicly report performance audits, including on environmental infrastructure, data systems and data gaps;¹⁵⁹
- nationally consistent standards for monitoring and reporting of environmental data, ensuring ‘openness’ so that the data can be used for many purposes;¹⁶⁰
- periodic review, upgrade and/or extension of monitoring infrastructure; and¹⁶¹
- improving the transparency and sharing of private environmental data.

RECOMMENDATION 3.3

*The Commonwealth should perform enhanced environmental monitoring, evaluation and reporting tasks. This requires a strategic approach to determining what data is needed for effective decision-making, who should be responsible for providing and collecting it, how frequently it should be collected, how it should be made available and used, and who should pay for this intelligence.*¹⁶²

For an effective approach to these tasks, it is essential that national coordination and leadership is ensured. The Commonwealth is best-placed, both in terms of resources and its capacity to influence outcomes, to pursue the various improvements outlined above, whilst at the same time working to achieve state collaboration through a range of incentives and disincentives, as outlined in Australian Panel of Experts on Environmental Law, *Environmental Governance* (Technical Paper 2, 2017).

4.2.4 Responsiveness to environmental change

Conservation in the context of climate change should not aim to prevent change, but should manage it to minimise loss of valued aspects of nature.¹⁶³ The principle of environmental restoration, recommended in Australian Panel of Experts on Environmental Law, *The Foundations of Environmental Law: Goals, Objects, Principles and Norms* (Technical Paper 1, 2017) is not focused on re-establishing ecosystems as they may once have existed, but on ensuring their complexity, structure and resilience to changing conditions.

While climate change and other variables will demand greater flexibility in how the environment is governed, without objective outcome standards (as well as reliable governance procedures) flexibility can result in continuing

158 National Water Commission, ‘Water for Mining and Unconventional Gas’, above n 65, 110. Mandatory reporting of data as a condition of development approval, for example, might capture some of the substantial amounts of information generated by EIA procedures.

159 See Alejandro Camacho, ‘Can regulation evolve? Lessons from a study in maladaptive management’ (2007/2008) 55 *University of California Law Review* 293; Melinda Benson, and Ahjond Garmestani, ‘Embracing panarchy, building resilience and integrating adaptive management through a rebirth of the National Environmental Policy Act’ (2011) 92 *Journal of Environmental Management* 1420, 1421.

160 Camacho, above n 159; B Karkkainen, ‘Managing transboundary aquatic ecosystems: lessons from the Great Lakes’ (2006) 19 *Pacific McGeorge Global Business and Development Law Journal* 209, 230–1.

161 Stephen Dovers, ‘Reflecting on three decades: a synthesis’ in Stephen Dovers and Su Wild-River (eds), *Managing Australia’s Environment* (Federation Press, 2003) 521–2.

162 See Australian Panel of Experts on Environmental Law, *Environmental Governance* (Technical Paper 2, 2017), for consideration of the functions of a new Commonwealth environmental institution.

163 Dunlop et al, above n 16.

deterioration. There is a need for clear, objective and measurable triggers that, if exceeded, will require more precautionary responses.¹⁶⁴ Responses to this challenge could include:

- strategic planning (including regional planning) that anticipates future changes (see 3.2.1);
- mechanisms to regularly revise plans, programs, or resource allocation arrangements to respond to changes;
- wider use of stepped or staged development approvals so that initial investment and impacts are limited, to make adaptation more feasible;
- framing approval conditions so that they can be modified if predefined thresholds relating to nature conservation or other natural resources are not being met.¹⁶⁵

The question of what to preserve involves prioritising components of biodiversity, based on human interests. It raises questions about whether conservation should be aimed at individual species, ecosystems or landscape complexes. These questions are both scientific and political, as both environmental attributes and human values are not constant. Broad community participation in this process is crucial.

Creating responsiveness will require adaptive governance. This should be done whilst maintaining a clear precautionary approach so that flexibility is achieved without erosion of substantive safeguards for nature. Strong integrity protections with independent accountability (for example, tribunals or agencies with monitoring responsibilities) are needed to ensure that environmental governance standards are not weakened whilst reducing complexity and improving the responsiveness of environmental law.

RECOMMENDATION 3.4

A governance system is required at the Commonwealth and state levels that is more adaptive to environmental change. This will require outcome objectives for the state of environmental resources, quantitative and measurable thresholds, and legal tools to implement stronger protections if systems or species are at risk of exceeding these thresholds.¹⁶⁶

NOTE: A comprehensive approach to landscape-scale planning (Recommendation 3.1) could also help overcome the deficiencies of fragmented project-specific development approval processes that do not address cumulative impacts.

4.2.5 Addressing implementation deficits

It has been noted above that significant implementation deficits exist with respect to the application of biodiversity conservation and NRM laws, for example, concerning the Murray Darling *Basin Plan* and its Water Resources Plans, gaps in the NRS and the management of invasive species. In addition to specific measures to address these particular contexts, there is a need for a broader system of safeguards and accountability with respect to the implementation of biodiversity conservation and NRM laws more generally.

¹⁶⁴ Jessica Lee, 'Theory to practice: Adaptive management of the groundwater impacts of Australian mining projects' (2014) 31(4) *Environmental and Planning Law Journal* 251.

¹⁶⁵ P McCormack and J McDonald, 'Adaptation strategies for biodiversity conservation: Has Australian law got what it takes?' (2014) 31 *Environmental and Planning Law Journal* 114.

¹⁶⁶ The means by which such a governance system could be developed across the Commonwealth and state levels of government is explored in Australian Panel of Experts on Environmental Law, *Environmental Governance* (Technical Paper 2, 2017). In particular, the idea of requiring state implementation plans (SIPs) to be developed and approved in relation to bioregional plans is proposed as a possible means of securing a consistent and coordinated approach to reform of the governance systems related to biodiversity and NRM.

RECOMMENDATION 3.5

Stronger safeguards are needed to ensure the integrity of implementation of legal and administrative protections for the environment. These should include independent performance review, with clear reporting to the public, incorporated into Commonwealth and state legislation.

4.2.6 Funding for NRM governance

A fundamental challenge to NRM is funding the work of government and providing support and incentives for private landholders. Market instruments, information programs, industry and civilian volunteer activities, and regulation, all require money and labour. Traditionally a substantial part of these funds has been provided through government and it will be necessary for this investment to continue. However, given the scale of the challenge and the competing demands on the public purse, alternative and innovative sources of funding must be found. The rise of social entrepreneurship (for example) represents an opportunity to leverage investment from the private sector for conservation and NRM (see also Australian Panel of Experts on Environmental Law, *The Private Sector, Business Law and Environmental Performance* (Technical Paper 7, 2017) for an in-depth discussion on such a role for the private sector). It is important, however, that government maintains, and preferably increases, its investment even as new funding sources are found.¹⁶⁷

Australia does not have an investment strategy for the environment. It has many disconnected and discontinuous programs, market and market-like experiments, and many private initiatives. There is no consensus about how much money is needed, from where it will come, and what strategies will be needed. Whilst the aspiration is often expressed that private funds, coupled with private stewardship, will reduce the need to rely upon regulation and provide more resources to protect and restore the environment, not enough practical work has been done to turn this hope into reality.

For private conservation investment to become the economic foundation for Australia's sustainability objectives, systematic reform is needed. The Industry Commission has suggested that three pillars are needed to support ESD and land management objectives:¹⁶⁸

- Use regulatory mechanisms to ensure that landholders and land managers properly manage the environmental impacts of their actions;
- Create or expand markets for natural resources and use economic instruments, in preference to command and control; and
- Encourage conservation philanthropy and conservation on private land.

A comprehensive environmental investment strategy would involve many elements. A new partnership between government, landholders, business and the broader volunteer community is essential. This may require reforms to: better define eco-service proprietary rights and the limits to those rights, clarify stewardship obligations, create eco-service markets that are transaction-cost efficient, provide more robust oversight and support for eco-service markets, reduce regulatory and administrative impediments to conservation on private landholdings, provide information and advice, set up institutions to collect and maintain environmental data, encourage corporate investment in the environment, for example through regulatory requirements, and implement appropriate institutional arrangements for environmental investment strategies that minimise transaction costs while maximising voluntary engagement.¹⁶⁹

¹⁶⁷ M Maron et al, 'Stop misuse of biodiversity offsets' (2015) 523 *Nature* 401.

¹⁶⁸ Industry Commission, 'A Full Repairing Lease: Inquiry into Ecologically Sustainable Land Management' (Report No. 60, Industry Commission, 1998), 125.

¹⁶⁹ Stephen Polasky, Holly Doremus and Bruce Rettig, 'Endangered Species Conservation on Private Land' (1997) XV(4) *Contemporary Economic Policy* 66; Productivity Commission, 'Promoting Better Environmental Outcomes' (Roundtable Proceedings, Productivity Commission, 2009); Martin and Werren, above n 146.

RECOMMENDATION 3.6

The Commonwealth should work with the states and the private sector to develop an effective fiscal model for natural resource governance. This should ensure that the costs of environmental stewardship can be met over the long term, and are borne equitably across the community.

4.2.7 A stronger role for indigenous communities

Aboriginal and Torres Strait Islander peoples have a connection to traditional land and waters that extends over many thousands of years prior to European colonisation of Australia.¹⁷⁰ That relationship includes cultural responsibilities to care for country that are transmitted across generations and which are embedded within the fabric of Aboriginal and Torres Strait Islander communities.¹⁷¹ Within Australia, various laws acknowledge and protect the unique relationship that Aboriginal and Torres Strait Islanders have with the environment. Agreement-making and co-management models have been significant in providing a platform for shared environmental governance in biodiversity protection, water management and NRM.

Increasingly, indigenous communities are leading efforts to implement conservation programs and ecological restoration measures. Considerable scope remains, however, for stronger inclusion of Aboriginal and Torres Strait Islander peoples in environmental protection measures; to build indigenous community capacity; to enhance the use of traditional knowledge in conservation and NRM and to recognise indigenous peoples' rights in traditional lands and waters. Environmental laws and institutions charged with responsibilities for environmental management can demonstrate principled leadership in this regard.

RECOMMENDATION 3.7

Commonwealth and state governments should make a clear commitment to ensure effective consultation with, and the active participation of, Aboriginal and Torres Strait Islander peoples in environmental protection measures, cultural heritage conservation and NRM. This commitment requires support for robust and culturally appropriate governance for Indigenous Protected Areas (IPAs), co-managed areas and Aboriginal and Torres Strait Islander peoples' land and waters and respect for the principle of free, prior and informed consent in regard to Aboriginal and Torres Strait Islander land and waters.¹⁷²

¹⁷⁰ *Mabo v Queensland [No 2]* (1992) 175 CLR 1; *Members of the Yorta Yorta Aboriginal Community v Victoria* (2002) 214 CLR 422, 37.

¹⁷¹ M Langton, 'The estate as duration: "Being in place"' in L Godden and M Tehan (eds) *Comparative perspectives on communal lands and individual ownership: Sustainable Futures* (Routledge, 2010).

¹⁷² See above n 7.

APEEL



The Australian Panel of Experts
on Environmental Law

MARINE AND COASTAL ISSUES

TECHNICAL PAPER 4

APEEL



The Australian Panel of Experts
on Environmental Law

The principal contributions to this paper were provided by APEEL consultant Dr Sarah Waddell and APEEL Panel member Professor Jan McDonald

About APEEL

The Australian Panel of Experts on Environmental Law (APEEL) is comprised of experts with extensive knowledge of, and experience in, environmental law. Its membership includes environmental law practitioners, academics with international standing and a retired judge of the Federal Court. APEEL has developed a blueprint for the next generation of Australian environmental laws with the aim of ensuring a healthy, functioning and resilient environment for generations to come. APEEL's proposals are for environmental laws that are as transparent, efficient, effective and participatory as possible. A series of technical discussion papers focus on the following themes:

1. The foundations of environmental law
2. Environmental governance
3. Terrestrial biodiversity conservation and natural resources management
4. Marine and coastal issues
5. Climate law
6. Energy regulation
7. The private sector, business law and environmental performance
8. Democracy and the environment

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Summary and Recommendations

Executive Summary

Australia's coastal and marine environments are vital to its economic, recreational, and cultural wellbeing, yet many indicators of marine ecosystem health are declining. Protecting coastal and marine biodiversity and resources against the stressors of coastal development, fishing, oil and gas development, pollution, invasive species and climate change is critically important.

Despite a range of policy commitments to integrated planning and management of marine resources and the coastal zone, current governance approaches are fragmented across various levels of government and sectoral regimes, including those for conservation, fishing, pollution control, biosecurity, and oil and gas and seabed mining.

Specific recommendations include:¹

- 4.1. *The Commonwealth to pursue agreement on a nationally-agreed vision for managing Australia's marine and coastal environment, with clearly-defined objectives and priorities, and measurable outcomes capable of supporting economic sectors reliant on the marine and coastal environment, ecosystem integrity and resilience, and ongoing enjoyment by the public (including anticipatory measures with respect to the impacts of climate change).*
- 4.2. *he Commonwealth to lead and implement a comprehensive system of marine spatial planning (MSP). Such a system will need to take a strategic approach that is ecosystem and place-based, participatory, adaptive, and that which integrates the needs of different sectors and agencies, and different levels of government. It will also need to address the land-sea divide and include coastal zone planning, noting the mechanisms for delivering coastal zone management may differ from those for the marine environment. MSP undertaken by the Great Barrier Reef Marine Park Authority provides a world-recognised example of how this may be achieved.*
- 4.3. *The Commonwealth to lead a national effort to ensure the completion of planning, establishment and management for the National Reserve System for Marine Protected Areas (NRSMPA), with the identification and zoning of new areas to be based on scientifically robust criteria, sound application of the CAR principles (comprehensive, adequate and representative) to establish a national network incorporating state and territory marine protected areas (MPAs), and national guidelines for MPA management.*
- 4.4. *The Commonwealth to lead a national effort to develop stronger measures for the prevention and control of marine pollution including damage to ecosystems from coastal development, particularly land-based sources of pollution affecting the Great Barrier Reef (GBR) and marine plastic pollution (MPP).*
- 4.5. *The Commonwealth should adopt more robust approaches to marine biosecurity, including nationally consistent ballast water protocols, and an enhanced capacity for rapid responses to manage new invasions or outbreaks.*

¹ Australian Panel of Experts on Environmental Law, *Environmental Governance* (Technical Paper 2, 2017) outlines in detail the means by which the various aspects of Commonwealth leadership identified in these recommendations would be pursued in collaboration with the states. Commonwealth leadership is envisaged at a strategic level, with the States continuing to exercise their established legislative and policy functions in accordance with Commonwealth-designed strategies, standards, plans etc.

- 4.6. *The Commonwealth should work with the states to develop a sustainable funding model to support the marine spatial planning (MSP) process and subsequent management of marine protected areas (MPAs) and marine resources, taking into account the unique features of the marine environment, and the wide range of marine and coastal users and stakeholders.*
- 4.7. *For both the marine spatial planning (MSP) process and the completion of the National Reserve System for Marine Protected Areas (NRSMPA), better engagement with indigenous groups and recognition of sea country is essential, including recognition of the potential for multiple legal and non-legal modalities for sea country governance.*

HOW TO CONTRIBUTE TO THE APEEL PROJECT

APEEL invites you to provide your responses to the ideas and recommendations presented in this paper. This will assist the development of our final proposals for the next generation of Australian environmental laws.

We look forward to your engagement on specific reform options as the APEEL journey progresses.

Please send your responses to: admin@apeel.org.au or go to www.apeel.org.au where you can do so online.

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1. Introduction

As an island nation with an extensive coastline and vast Exclusive Economic Zone (EEZ), Australia derives significant cultural and recreational value, as well as economic wealth, from its coastal and marine environment. Both indigenous and non-indigenous Australians have long had a strong connection with the seas. Approximately 85% of the Australian population live within 50 km of the coast and more than 70% of Australia's territory is beneath the ocean.² Australia's maritime jurisdiction is the third largest in the world and covers almost 4% of world's oceans.³

Australia's marine and coastal environment is valued by different groups in varying and sometimes conflicting ways. Marine and coastal biodiversity provides a wide range of valuable ecosystem goods and services and marine industries make a major economic contribution, though these contributions are not fully appreciated. As stated by the Australian Institute for Marine Science (AIMS):

Although the marine based industries already contribute more to the national economy than the agricultural sector - over \$42 billion in 2009-10 – much of Australia's ocean territory remains inadequately surveyed and our understanding of the complex interactions that sustain these marine ecosystems is inadequate to provide the certainty sought by both industry and regulators.⁴

Australian sea lanes provide a critical connection and gateway to the global economy.⁵ Commercial fisheries are valued at \$2.2 billion annually, while tourism is valued at over \$1 billion and ecosystem services are valued at over \$25 billion.⁶ The contribution of the Great Barrier Reef World Heritage Area alone to the Australian economy is over \$5.6 billion and it generates almost 69,000 full-time equivalent jobs.⁷ The National Marine Science Committee (formerly the Oceans Policy Scientific Advisory Group – OPSAG) estimates that the ocean contributes \$44 billion to the current economy and suggests the 'blue economy' will only increase in value.

Tourism values the coastal and marine environment for its natural quality and attractiveness, particularly open space that is free from pollution, areas of relatively intact natural coastal habitats, and temperate and coral reefs. More broadly, Australians value the marine and coastal environment as a place of enjoyment and recreation. Intrinsic values that are more difficult to quantify in economic terms relate to the richness of biodiversity within the coastal and marine environment. Despite the importance of coastal and marine environments to Australia's economic, cultural and social well-being, the biodiversity and ecosystem health of some coastal and marine environments, particularly in the east, south-east, and south-west continues to decline. Extreme events are also taking a toll: the marine heatwave of 2016 caused massive coral bleaching events in the Great Barrier Reef (GBR) and vast areas of mangrove dieback in the Gulf country across the Northern Territory and Queensland. Its effects were felt as far south as the east coast of Tasmania.

The term 'marine environment' has not been defined in a legal instrument.⁸ For the purposes of this paper, *marine environment* refers to the area below the low-water mark along the coastline extending seaward into the high seas. It encompasses the water column, sea bed and subsoil and the surface of the ocean.⁹ The *coastal environment* includes the area between the low and high-water mark, but may extend several kilometers upstream in a river that flows to the ocean and includes landforms adjacent to the high-water mark.¹⁰

2 Australian Institute of Marine Science, *The AIMS Index of Marine Industry* (2012), 1 <<http://www.aims.gov.au/documents/30301/23122/The+AIMS+Index+of+Marine+Industry+2012.pdf/d0fc7dc9-ae98-4e79-a0b2-271af9b5454f>>.

3 Warwick Gullett, Clive Schofield and Joanna Vince, 'Girt by Sea: The Challenge of Managing Australia's Marine Resources', in Warwick Gullett, Clive Schofield and Joanna Vince (eds), *Marine Resources Management* (LexisNexis Butterworths Australia, 2011) 4; Australian Institute of Marine Science, *marine-nation* <<http://www.aims.gov.au/docs/featured-content/marine-nation.html>>.

4 Australian Institute of Marine Science, above n 2, 1. See the comparative analysis of economic value of maritime sectors, 2-11.

5 Warwick Gullett, Clive Schofield and Joanna Vince, above n 3, 4.

6 Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES), *Australian Fisheries Statistics 2012* (2013); Ocean Policy Science Advisory Group (OPSAG), *Marine Nation 2025* (2012) 9.

7 Department of Environment and Energy (Cth), *Economic contribution of the Great Barrier Reef* (March 2013) <<https://www.environment.gov.au/sustainability/publications/economic-contribution-great-barrier-reef-march-2013>>.

8 Donald R Rothwell and Rachel Baird, 'Australia's Coastal and Marine Environment' in R Baird and D R Rothwell (eds) *Australian Coastal and Marine Law* (Federation Press, 2011) 6. See also Richard Kenchington and David Crawford, 'On the Meaning of Integration in Coastal Zone Management' (1993) 21 *Ocean & Coastal Management* 109-127, 110-111.

9 Rothwell and Baird, note 8, 6.

10 Ibid 3-4.

The *coastal zone* has a distinct meaning,¹¹ which becomes important in relation to the internationally recognized goal of Integrated Coastal Zone Management (ICZM). As described by Post and Lundin, the coastal zone is ‘the interface where the land meets the ocean, encompassing shoreline environments as well as adjacent coastal waters. Its components can include river deltas, coastal plains, wetlands, beaches and dunes, reefs, mangrove forests, lagoons, and other coastal features’.¹² In this zone there is a dynamic interaction between the land and sea. For example, tides, currents, waves and wind from the sea affect the land, and sediment, nutrients and other matter (including pollution) from land-based activities and processes affect the sea. Where defined by linear boundaries, the definition focuses on features such as the mean high-water mark or local government administrative boundaries or biophysical features.¹³ The coastal zone may be defined solely by interaction between natural resources on land and in the sea, which could cover land stretching from a watershed to the sea. This approach may be impractical due to the potentially large size of the area. According to Post and Lundin, therefore, the better approach is to identify it as a *special area* - endowed with special characteristics - whose boundaries are determined by the specific problems to be tackled.¹⁴

APEEL is examining how to make the Australian laws and institutions that govern its coastal and marine resources along the catchment-coast-marine continuum more coherent and effective; how to use innovative approaches to secure the resources needed to achieve sustainability efficiently; and how to build stronger relationships between government, industry, conservation interests and the broader community to manage its coastal and marine resources. The legal regime for protecting and managing coastal and marine environments must address threats to environmental quality and, where possible, seek to remediate damage or reverse trajectories of decline. Many of the activities that constitute key threats are subject to their own statutory regimes, such as fisheries, offshore oil and gas extraction, and shipping. Rather than seek to provide a detailed overview of each of these legal regimes, this *Technical Paper* focuses on the underlying failures in governance and weaknesses in institutional arrangements and makes recommendations on how the legal framework should address these governance challenges.

This *Technical Paper* shares issues in common with Australian Panel of Experts on Environmental Law, *Environmental Governance* (Technical Paper 2, 2017), Australian Panel of Experts on Environmental Law, *Terrestrial Biodiversity Conservation and Natural Resources Management Governance* (Technical Paper 3, 2017) and Australian Panel of Experts on Environmental Law, *The Private Sector, Business Law and Environmental Performance* (Technical Paper 7, 2017). This paper echoes the call in Australian Panel of Experts on Environmental Law, *Terrestrial Biodiversity Conservation and Natural Resources Management Governance* (Technical Paper 3, 2017) for strategic, landscape-scale management, decision-making processes that account for indirect and cumulative impacts, and adaptive management approaches that recognise the dynamic nature of these systems.

¹¹ Ibid 4.

¹² Jan C. Post and Carl G. Lundin (eds) ‘Guidelines For Integrated Coastal Zone Management’ (Environmentally Sustainable Development Studies and Monographs Series No 9, The World Bank, August 1996) 3.

¹³ Rothwell and Baird, above n 8, 4.

¹⁴ Post and Lundin, Note 12, 3.

2. Key Issues

2.1 Status, trends and threats

The coastal and marine environment has been divided into five management regions based on regional criteria: South-west, North-west, North, East (Temperate East and Coral Sea) and South-east. The assessment of each of these regions in the *2011 Australian State of the Environment Report (SoE Report 2011)*¹⁵ is represented in the map below. The *SoE Report 2011* found that biodiversity in the North and North-west regions was in very good condition, biodiversity in the East and South-west regions are in good condition, but poor, bordering on good, in the South-east region.¹⁶ Detail within this broad overall assessment illuminates concerning trends, particularly in relation to quality of habitat and certain species and species groups.

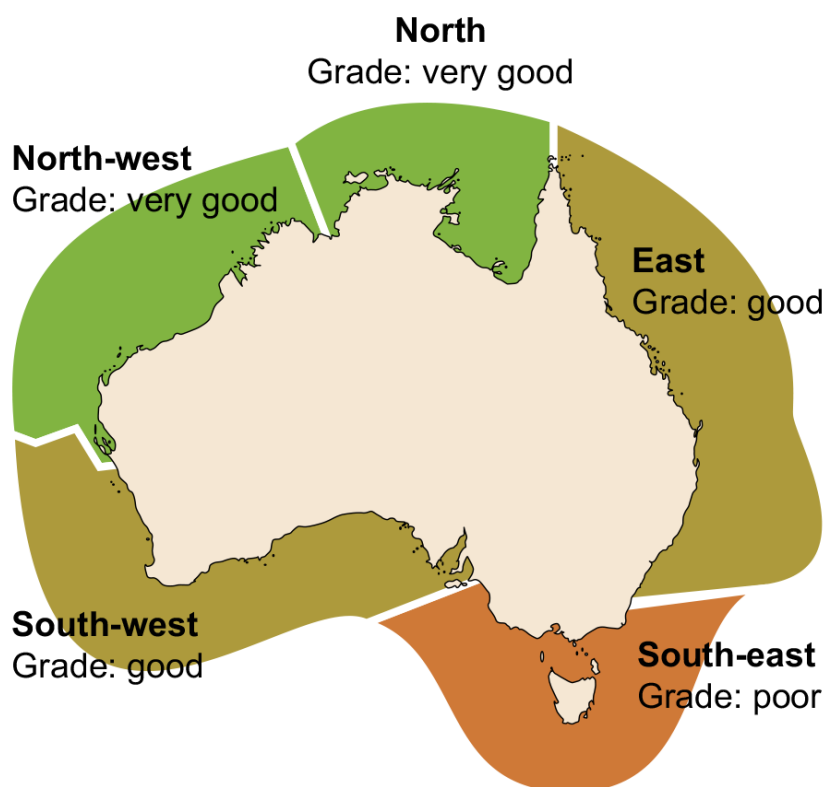


Figure 1: The overall condition of most components of biodiversity in each SoE reporting region, SoE Report 2011 (Figure 6.10)

The coastal and marine environments of the East, South-east and South-west regions, have experienced heavy degradation in gulfs, bays, estuaries and lagoons. The overall poor quality of habitat in the South-east region is said to be due to pressures from population, shipping, fishing and development.¹⁷ Issues affecting marine ecosystem health in the South-east region include changes to the dynamics of freshwater inputs and hydrological cycles, sediment and land-based nutrient input, changes to turbidity and light.¹⁸ Coastal development also affects the South-west region,

¹⁵ State of the Environment 2011 Committee, *Australia State of the Environment 2011 – Independent report to the Australian Government Minister for Sustainability, Environment, Water, Population and Communities* (2011) 371-465.

¹⁶ Ibid 389.

¹⁷ Ibid 391.

¹⁸ Ibid 405.

with estuaries and lagoons in very poor condition.¹⁹ The continuing decline of Australia's marine biodiversity²⁰ is characterised by species extinctions, invasions and hybridisations, reduced populations, diminution of habitats, and disruptions in ecosystem processes (for example, cycling of water, nutrients and energy).²¹

Many pressures are related to activity by sectors using coastal and marine resources (fisheries, oil and gas, shipping, tourism), coastal development which has led to loss of habitat (clearing of coastal vegetation, failure to prevent storm water runoff, dredging, construction of jetties), allowing invasive species to enter the coastal and marine environment, and pollution from ships and land-based sources (urban runoff, sediments, release of fertilisers/pesticides to the sea,²² rubbish and plastic pollution).²³ In 2006, the Natural Resources Management Ministerial Council (NRMCMC) identified five issues facing the coastal zone that required national collaboration: land and marine-based sources of pollution, managing climate change, introduced pest plants and animals, allocation and use of coastal resources, and capacity building.²⁴ The NRMCMC has since been disbanded and there is no entity within the Council of Australian Governments (COAG) currently focusing on issues related to collaborative management of Australia's coastal and marine environment.²⁵

The pressures of land-based point and non-point source marine pollution (sediments, nutrients, pesticides, litter etc.) are generally more serious in the East, South-east and South-west regions.²⁶ The GBR has been severely affected by land-based pollution. The Queensland and Australian governments' *Reef Water Quality Protection Plan* (2003, with subsequent updates) sets water quality targets for reductions in river loads of dissolved inorganic nitrogen, sediment and pesticides by 2018.²⁷

Marine debris or marine litter is also an issue.²⁸ Whilst data on the full impact of marine debris has been difficult to acquire,²⁹ it is known that marine debris poses significant threats to at least 20 endangered and vulnerable marine vertebrate species in Australia and the impact is increasing.³⁰ The volume of human refuse making its way into the coastal and marine environment continues to grow,³¹ with an estimated 80% of the debris/litter, chemicals and oil found in the sea comes from land-based activities.³² Marine plastic pollution (MPP) has recently received formal recognition as a national problem with the release of a report by the Senate Standing Committees on Environment and Communications entitled '*Toxic tide: the threat of marine plastic*'.³³ MPP is found in approximately 75% of debris along the coastline,³⁴ and largely comes from domestic land-based sources.³⁵ A focus of recent concern has been microplastic

19 Ibid 390.

20 Marine Biodiversity Decline Working Group, Marine and Coastal Committee of the Natural Resources Management Ministerial Council, *A National Approach to Addressing Marine Biodiversity Decline* (April 2008) <<http://www.environment.gov.au/system/files/resources/060fc5f4-41e6-4d3b-88d4-f73fa7ed95b3/files/marine-diversity-decline.pdf>>. The Working Group identified highest priority broad-scale threats to marine biodiversity as climate change; resource use; land-based impacts; marine biosecurity; and marine pollution. It set out a comprehensive approach to addressing impacts, but this has not yet been implemented.

21 State of the Environment 2011 Committee, above n 15, 391.

22 For example, a key threat to the health of the Great Barrier Reef, is agricultural run-off from the sugar cane and cattle farming activities upstream in the catchments that flow into the Coral Sea.

23 Marine Biodiversity Decline Working Group, above n 20.

24 Natural Resources Management Ministerial Council, *National Cooperative Approach to Integrated Coastal Zone Management - Framework and Implementation Plan*, Commonwealth of Australia (2006) <<http://www.environment.gov.au/system/files/resources/5ce3ba77-4b62-43f0-a1e0-4a1a2266500e/files/framework.pdf>>: this report comprehensively identified future actions under seven Priority Areas.

25 For a more detailed discussion of the scrapping of long-standing inter-governmental cooperative arrangements with respect to the environment, see Australian Panel of Experts on Environmental Law, *Environmental Governance* (Technical Paper 2, 2017).

26 State of the Environment 2011 Committee, above n 15, 414.

27 Queensland Government, *Reef Water Quality Protection Plan* (2013) <<http://www.reefplan.qld.gov.au/about/>>.

28 National Oceanic and Atmospheric Administration, *What is Marine Debris?* <<http://oceanservice.noaa.gov/facts/marinedebris.html>>; the United Nations Environment Program has described marine litter as follows:

'Marine litter is an environmental, economic, health and aesthetic problem. It causes damage and death to wildlife. It threatens marine and coastal biological diversity in productive coastal areas. Pieces of litter can transport invasive species between seas. Medical and sanitary waste constitutes a health hazard and can seriously injure people. Every year, the presence of marine litter causes damage that entails great economic costs and losses to people, property and livelihood, as well as poses risks to health and even lives. And marine litter spoils, fouls and destroys the beauty of the sea and the coastal zone'.

United Nations Environment Program, *Marine Litter an Analytical Overview* (2005) <http://www.unep.org/regionalseas/marinelitter/publications/docs/anl_oview.pdf>.

29 State of the Environment 2011 Committee, above n 15, 430.

30 Department of the Environment (Cth), *Harmful Marine Debris* <<http://www.environment.gov.au/resource/harmful-marine-debris>>.

31 Britta Denise Hardesty et al, *Understanding the effects of marine debris on wildlife* (CSIRO, 2014) 4.

32 Australian Marine Environment Protection Association, *Ships and the Marine Environment* <<http://www.ausmepa.org.au/ships-and-the-marine-environment/5/types-of-pollution.htm>>.

33 Senate Standing Committees on Environment and Communications, Parliament of Australia, *Toxic tide: the threat of marine plastic* (2016).

34 Hardesty, above n 31, 3.

35 CSIRO, *Sources, distribution and fate of marine debris* (October 2016) <www.csiro.au/marine-debris>.

pollution defined as plastic particles up to 5mm in diameter,³⁶ which results from the breakdown of macroplastics or originates as microplastics.³⁷

Invasive marine species are posing an increasing threat to the health of Australia's native species in some regions. Arrivals of invasive species are occurring through ship's ballast water and through natural migration of species due to climate change that is causing changes in habitat.³⁸ Over 250 introduced marine plants and animals have 'hitch-hiked' to Australian waters on vessels of all types, from yachts to commercial ships. Some have displaced native species from their habitats, changing the coastal areas and damaging the fishing, aquaculture and tourism industries. More than 100 species are monitored as marine pests.³⁹

2.2 Future scenarios

Based on current trends, pressures on the coastal and marine areas are only likely to increase over time, both individually and cumulatively.⁴⁰ Australia's population is projected to increase by 50-100% over the next 50 years, with growth continuing until at least the end of the century.⁴¹ Expansion of the urban footprint requires careful planning and management in order to avoid or minimise pressures on the coastal and marine environment.

Coastal and marine tourism remains a growth sector, while new industries such as intensive aquaculture, offshore wind farms, tidal energy infrastructure and seaweed cultivation may emerge in the future. Increased global demand for seafood may create opportunities for Australian fisheries and aquaculture, but will also require careful management to avoid overharvesting and other environmental impacts. The exploitation of undersea resources, such as oil and gas and, more recently, sea-bed mining, present particular challenges. Drilling, seismic surveys, raw material extraction, port and pipeline development and increased shipping have potential negative impacts.⁴² Increased offshore oil and gas activity is already leading to conflict with other marine sectors such as commercial fishing and tourism.

Climate change exacerbates existing pressures and presents a suite of new challenges for both coastal communities and ecosystems. Coastal infrastructure will face increased coastal erosion and inundation as a consequence of sea level rise and changed storm patterns. Coastal ecosystems will face a 'squeeze' where communities are forced to retreat, and there is likely to be adverse effects on beach amenity and ecosystems where engineered coastal defences are installed. Rising sea temperature has already caused serious coral bleaching and loss of mangroves. It is expected to lead to significant changes in distribution of species of importance to commercial and recreational fishers and the spread of native and non-native invasive species. Commercial fish stocks may change location, moving further south, and tropical fish are likely to move into areas previously regarded as temperate. Increasing ocean acidification may undermine existing ecosystem integrity in unpredictable ways.

Given the range of current and future pressures facing the marine and coastal environment, it is not surprising that the *SoE Report 2011* concluded that:

The cumulative pressures on our marine ecosystems are rapidly growing. Impacts from climate change are beginning to escalate, population pressures and coastal development continue to grow, globalisation of marine industries continues, the risks to tropical waters from oil and gas developments are increasing.⁴³

36 United Nations Environment Program, *Microplastics* <<http://www.unep.org/yearbook/microplastics.asp>>.

37 Some sources of microplastic pollution can be readily identified such as nurdles, plastic beads used in cosmetics, and fibres from synthetic fleeces loosened during laundering; Mark Anthony Browne et al, 'Accumulation of Microplastic on Shorelines Worldwide: Sources and Sinks' (2011) 45(21) *Environmental Science and Technology* 9175; University of New South Wales School of Biological, Earth and Environmental Sciences, *Microplastic threat to Sydney Harbour* (25 August 2014) <<http://bees.unsw.edu.au/microplastic-threat-sydney-harbour>>.

38 Australian Committee for IUCN, *Conserving Australia's Marine Environment: Key Directions Statement* (2013) Key Direction 14 <<http://www.aciucn.org.au>>.

39 Australian Government, *About the National System for the Prevention and Management of Pest Incursions* <<http://www.marinepests.gov.au/national-system/Pages/default.aspx>>.

40 Australian Committee for IUCN, above n 38, 373.

41 Australian Bureau of Statistics, *3222.0 - Population Projections, Australia, 2012 (base) to 2011* (26 November 2011) <[http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/3222.0main+features32012%20\(base\)%20to%202011](http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/3222.0main+features32012%20(base)%20to%202011)>.

42 Australian Committee for IUCN, above n 38, Key Direction 13.

43 State of the Environment 2011 Committee, above n 15, 373.

3. Institutional and legal arrangements – an overview and critique

3.1 The underlying goal of ecologically sustainable development (ESD)

As with terrestrial biodiversity and natural resources management, laws governing human use of the coastal and marine environments and resources have not always had protection or sustainable use as their central aim. Many early fisheries laws and, more recently, offshore oil and gas legislation, encouraged the exploitation of marine resources for economic gain with little consideration of environmental impacts. Development along the coastline has taken place according to state/territory land use planning and development control frameworks, and much of this legislation has tended to prioritise development over conservation or protection of natural values.

This historical policy focus has changed in recent years. *Ecologically sustainable development* (ESD) now formally underpins many of the legal regimes governing uses of marine and coastal environments. However, despite ESD's commitment to integrated decision-making across environmental, social and economic values, the prioritisation of economic development over environmental and social concerns has remained evident in many instances. Australian Panel of Experts on Environmental Law, *The Foundations of Environmental Law: Goals, Objects, Principles and Norms* (Technical Paper 1, 2017), analyses the ESD goal and makes recommendations for a national process to review and revise this goal and to develop new accompanying objects and principles.

3.2 Marine and coastal governance arrangements

The governance landscape for marine and coastal activities - like terrestrial natural resources management - remains highly fragmented and poorly coordinated. The laws and instruments that affect the use of coastal and marine resources are administered by numerous government actors, many with roles and responsibilities that are either resource-specific or overlapping. Non-state actors perform important monitoring, research and site-specific conservation activities. Management of the coastal and marine environment is made even more complex by the division of authority between the Commonwealth, the States/Northern Territory and local government.

3.2.1 Constitutional arrangements and national policy

The Australian Government's capacity to legislate on marine affairs primarily comes from power granted by the *Australian Constitution* to legislate with respect to external affairs (s 51(xxix)) and fisheries (s 51(x)). A vast array of international conventions influence Australian law for the management and protection of the marine environment and resources.⁴⁴ The Commonwealth has constitutional jurisdiction over the territorial sea below the low water mark.⁴⁵ The *Intergovernmental Agreement on the Environment 1992 (IGAE)* recognised the marine environment as a national environmental issue for which the Commonwealth had a legitimate role.⁴⁶ Despite the Commonwealth's jurisdiction, however, the 1979 *Offshore Constitutional Settlement (OCS)*⁴⁷ between the Commonwealth and states and territories implements a complex system of cooperative federalism.⁴⁸ The *Coastal Waters (State Powers) Act 1980 (Cth)* (*Powers*

44 1982 *United Nations Convention on the Law of the Sea (UNCLOS)* established the main international legal framework: article 192 gives States the right to exploit their natural resources; article 193 explicitly subjects that right to the obligation to 'protect and preserve the marine environment'. Other important international instruments include the International Maritime Organisation Conventions such as the 1978 MARPOL Protocol relating to the *International Convention for the Prevention of Pollution from Ships* and the 1972 *London Convention on the Prevention of Marine Pollution by the Dumping of Wastes and Other Matter*; 1972 *Convention for the Protection of the World Cultural and Natural Heritage*; and 1992 *Convention on Biological Diversity*. See Donald R Rothwell, 'The International Framework' in Baird and Rothwell (eds), above n 8, 21-44.

45 *NSW v Commonwealth* (1975) 135 CLR 337; Rachel Baird, 'The National Legal Framework' in R Baird and D R Rothwell (eds) *Australian Coastal and Marine Law* (Federation Press, 2011) 6, 45-66, 47-48.

46 *Intergovernmental Agreement on the Environment 1992*, art 2.2.1. However, the Commonwealth has undertaken to consult with the States before committing to any international agreements: Gerry Bates, *Environmental Law in Australia*, (LexisNexis Butterworths Australia, 8th ed, 2013) 171.

47 For a history of Australia's offshore jurisdiction see Michael White, 'Australia's Offshore Legal Jurisdiction: Part 1 – History & Development' (2011) 25 *Australia and New Zealand Maritime Law Journal* 3; also Baird, above n 45; Warwick Gullett and Greg Rose, 'Australia's Marine Jurisdictions under International and Domestic Law' in Warwick Gullett, Clive Schofield and Joanna Vince (eds), *Marine Resources Management* (LexisNexis Butterworths Australia, 2011) 25-39.

48 Baird, above n 45, 50.

Act) gives to the states title to 3 nm of the territorial sea from the territorial sea baseline.⁴⁹ It also confers legislative responsibility over: all activities within 3 nm from the territorial sea baseline and specified activities beyond 3 nm regarding fisheries, shipping facilities and works and some subterranean mining.

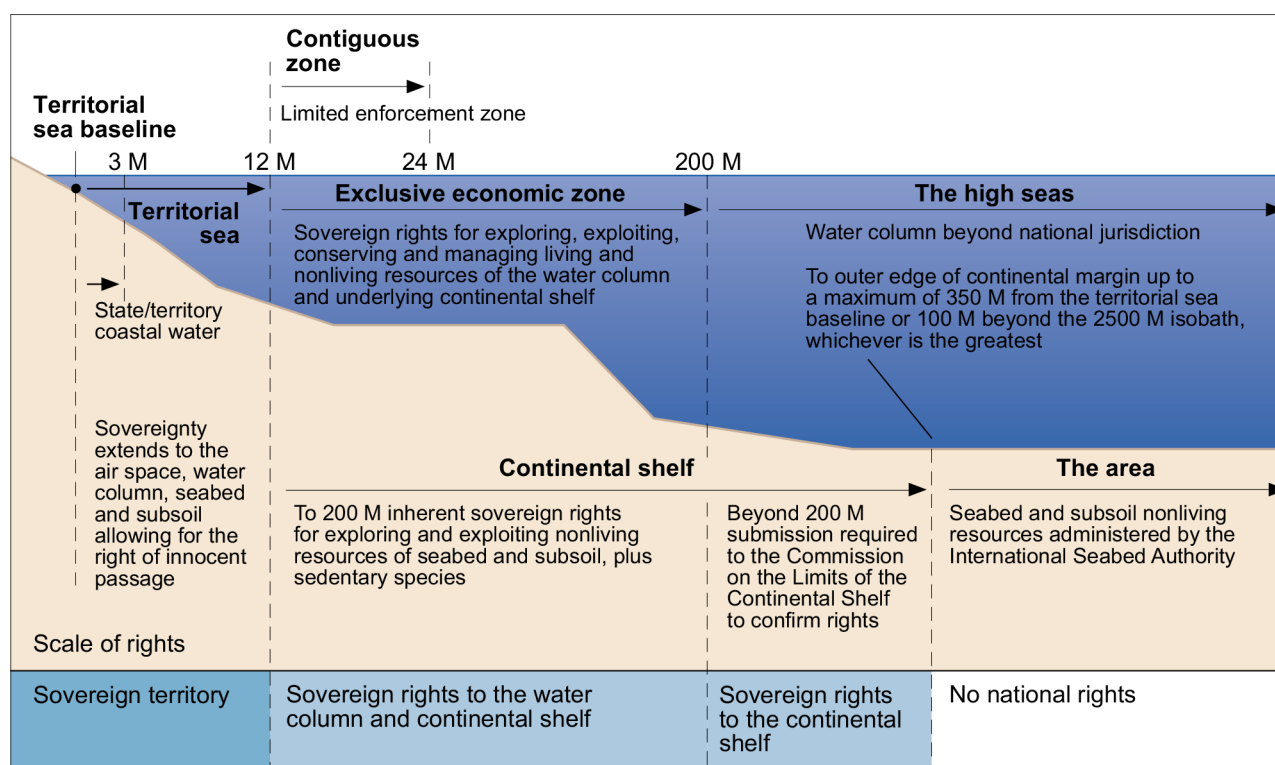


Figure 2: Jurisdiction zones for Australia's marine environment
Source: SoE Report 2011 (Figure 6.1) as adapted from Symonds et al.⁵⁰

In practice, this means that the state and Northern Territory governments regulate all activities: (i) along the shore to the low-water mark; (ii) within coastal waters (low water mark to 3 nm); and (iii) in the 'adjacent area'⁵¹ that has been allocated to them for sectoral activities such as mining, harbours, other shipping facilities and certain fisheries.⁵² The states and Northern Territory are also responsible for land-use decisions along the coast and all land-based activities that may impact on coastal or marine areas.

The Commonwealth has legislative responsibility for:

- the 'adjacent area' in relation to matters other than mining, harbours, other shipping facilities and certain fisheries (s 5(c) *Powers Act*);
- areas beyond the 'adjacent area' (s 51 (xxix) *Australian Constitution*; *Seas and Submerged Lands Case*) to the seaward boundary of the Territorial Sea; and
- areas beyond and adjacent to the territorial sea to the seaward boundary of the EEZ (200 nm) which includes the seabed, continental shelf and the airspace above those waters.

49 Baird, above n 45, 50-51.

50 Philip Symonds, Mark Alcock and Colin French, 'Setting Australia's limits – Understanding Australia's Marine Jurisdiction' (2009) *AusGEO News* 93 <www.ga.gov.au/ausgeonews/ausgeonews200903/limits.jsp>.

51 Baird, above n 45, 51-52.

52 Australian Government Geosciences Australia, *Maritime Boundary Definitions* <<http://www.ga.gov.au/scientific-topics/marine/jurisdiction/maritime-boundary-definitions>>.

In relation to fisheries, provision has been made for cooperative fisheries management. This may take the form of a joint authority via an arrangement between the Commonwealth and one state or, if required, the Commonwealth and two or more states. Alternatively, the Commonwealth and a state(s) may agree on an arrangement for a particular fishery.⁵³

In addition, Australia has sovereign rights over the continental shelf beyond the EEZ for the purposes of exploring and exploiting the mineral and other non-living resources of the seabed and subsoil, together with sedentary organisms. Australia has jurisdiction with regard to marine scientific research as well as other rights and responsibilities. The extent of continental shelf, beyond the EEZ, that can be claimed by Australia is determined by the *United Nations Commission on the Limits of the Continental Shelf*.

The arrangements established under the OCS mean that governance of Australia's marine and coastal environment is both complex and fragmented, making it hard to achieve nationally coordinated or consistent approaches to many problems. Australian Panel of Experts on Environmental Law, *Environmental Governance* (Technical Paper 2, 2017) discusses the role of the Commonwealth more generally with respect to environmental matters and makes recommendations concerning the means by which the Commonwealth could provide national leadership of a strategic nature, including for marine and coastal areas.

3.2.2 Sectoral laws on resource use

Fisheries and offshore oil and gas extraction are regulated in Commonwealth waters by the *Fisheries Management Act 1991* (Cth), the *Offshore Minerals Act 1994* (Cth), the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* (Cth) and the *Navigation Act 1912* (Cth). The Australian Fisheries Management Authority administers the *Fisheries Management Act 1991* (Cth). The National Offshore Petroleum Safety and Environmental Management Authority administers the *Offshore Minerals Act 1994* (Cth) and *Offshore Petroleum and Greenhouse Gas Storage Act 2006* (Cth). The Australian Maritime Safety Authority administers the *Navigation Act 1912* (Cth). Australia has also given effect to numerous international conventions dealing with marine pollution, *for example through the Environment Protection (Sea Dumping) Act 1981* (Cth) and the *Protection of the Sea (Prevention of Pollution from Ships) Act 1983* (Cth), both of which are administered by the Department of Environment.

The states and Northern Territory also have legal regimes regulating fisheries, oil and gas resources in coastal waters, and activities near the coastline such as port development, mining, residential and industrial development. A large number of Acts are separately administered by State/Northern Territory agencies with the following portfolios:

- wild fisheries and aquaculture
- mines and petroleum
- transport (commercial and recreational boating, marinas, jetties, shipping channels)
- regional and local land use planning
- water (estuaries and rivers, water quality, environmental health, aquatic and fringing vegetation)
- environment and conservation (marine mammals, seabirds, reptiles, marine water pollution and quality, environmental impacts, terrestrial and marine parks and reserves).

⁵³ Rachel Baird, 'Fisheries Management', in R Baird and D R Rothwell (eds) *Australian Coastal and Marine Law* (Federation Press, 2011) 122-150, 128-131.

3.2.3 Critique of current governance arrangements

The extent of fragmentation is all too apparent, as each agency operates under its own statutory regime and has its own mission, culture, structure and influences. In some sectors like offshore mining, the Commonwealth, states and Northern Territory have agreed to adopt common principles and practices (for example, in the *Offshore Minerals Act 1994* (Cth) and the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* (Cth) it was agreed that ‘common principles, rules and practices’ would be developed). In some sectors, however, there are significant differences in the applicable laws and policies, especially with respect to coastal development.

3.3 Marine planning, management and biodiversity conservation

3.3.1 3.3.1. Integrated and ecosystem-based planning and management

Australia’s Oceans Policy 1998 (the *Oceans Policy*)⁵⁴ recognised that ‘[m]anagement of our oceans purely on an industry-by-industry basis will not be sustainable in the long run. Activities such as fishing, tourism, shipping, aquaculture, coastal development and petroleum production must be collectively managed to be compatible with each other and with the ecological health of the oceans’.⁵⁵ A stated aim of the *Oceans Policy* was to establish a framework for integrated and ecosystem-based planning and management to ‘ensure economic benefit exists side by side with sensitive environmental care’.⁵⁶ Accordingly, the Commonwealth committed to a system of cross-jurisdictional and cross-sectoral regional marine planning to provide ‘integrated and ecosystem-based planning and management’ through the introduction of a Regional Marine Planning (RMP) process. RMPs were based on large marine ecosystems spanning state/territory and Commonwealth jurisdictions and were to integrate sectoral commercial interests and conservation requirements, based on ‘Broad Principles for Ecologically Sustainable Ocean Use’.⁵⁷

As a policy-based initiative that lacked any legislative foundation, implementation of the marine spatial planning (MSP) goals of the *Oceans Policy* has not been achieved. Coordination of implementation with the states and Northern Territory faltered over the years that followed its release. The Commonwealth retreated from the goal of integrated and ecosystem-based planning and management. It relied instead on the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (*EPBC Act*) to:⁵⁸

- develop the system of bioregional planning provided for Commonwealth marine areas under the *EPBC Act*;⁵⁹ and
- conduct assessment and approval processes for actions in a Commonwealth marine area or the Great Barrier Reef Marine Park that have or are likely to have a significant impact on the environment.

Marine bioregional plans (MBPs) have been developed for four of the five regions established under Part 12 of the *EPBC Act*: the South-west, North-west, North and Temperate East regions.⁶⁰ MBPs describe the marine environment and conservation values (protected species, protected places and key ecological features), set out broad objectives for biodiversity and regional priorities, and outline strategies and actions. The Commonwealth Environment Minister must have regard to the applicable MBP when making a decision whether or not to approve an action under the *EPBC Act* (s

54 Department of the Environment and Energy (Cth), *Environment Department Archive* <<http://www.environment.gov.au/about-us/publications/archive>>.

55 Ibid 11.

56 Ibid Message from the Prime Minister.

57 Ibid 11.

58 There have been a number of accounts of the deviation from the aspirations of RMP as envisaged in *Australia’s Oceans Policy* to the *EPBC Act* approach of marine bioregional planning, for example, Joanna Vince, ‘Ten Years of Implementing Australia’s Oceans Policy: From an Integrated Approach to an Environmental Policy Focus’ (2008) 159 *Maritime Studies* 1; Chris Smyth et al, ‘Oceans Eleven: The implementation of Australia’s Oceans Policy and ecosystem-based regional planning’ (Australian Conservation Foundation Report, 2003); Joanna Vince ‘Managing Australia’s Oceans Through the Oceans Policy Process’ in Warwick Gullett, Clive Schofield and Joanna Vince (eds), *Marine Resources Management* (LexisNexis Butterworths, 2011) 77–89; Geoff Wescott, ‘The Development and Initial Implementation of Australia’s ‘Integrated and Comprehensive’ Oceans Policy’ (2000) 43 *Ocean and Coastal Management* 853.

59 *Commonwealth marine area* according to the *EPBC Act* (s 24) includes the waters inside the seaward boundary of the exclusive economic zone (EEZ) which includes the seabed, continental shelf and the airspace above those waters, with the exception of waters of a state or the Northern Territory.

60 Department of Environment, *Marine Bioregional Plans* <<http://www.environment.gov.au/coasts/marineplans/index.html>>. In relation to the South-east Marine Region, a Region Profile has been prepared. As this was not done under the *EPBC Act* it has no legal status in decision-making. However, it is said to provide a useful source of information about the South-east Marine Region that could inform decisions made under the *EPBC Act*: Department of the Environment (Cth), *South-east marine region profile: A description of the ecosystems, conservation values and uses of the South-east Marine Region* (2015) <<http://www.environment.gov.au/marine/publications/south-east-marine-region-profile>>.

176(5)). The existence of a MBP can avoid the need to proceed with a lengthy approval process where the Minister so declares and an action is to be carried out in accordance with the plan (*EPBC Act* ss 37, 37A-J), but does not result in more proactive management approaches.

3.3.2 Marine protected areas

Marine protected areas (MPAs) are widely regarded as essential for marine biodiversity conservation.⁶¹ Establishing a network of MPAs was an element of the *IGAE*. The Aichi Targets under the 1992 *Convention on Biological Diversity* call for at least 10% of each of the world's marine and coastal ecological regions to be effectively conserved by 2020.⁶² The Commonwealth has given considerable attention to establishing a National Representative System of Marine Protected Areas (NRSMPA) within each bioregion mentioned above.⁶³ Prior to the NRSMPA, the national coverage of marine reserves was 4.5% and it has since been increased to 13.33%.⁶⁴ In total, the NRSMPA covers more than one third of the Commonwealth marine area⁶⁵ and aims to capture the diversity of marine ecosystems and habitats in Australia's oceans, using the CAR principles.⁶⁶

Every Commonwealth MPA has been assigned to one or more of the IUCN reserve categories⁶⁷ and is to be managed under associated management criteria.⁶⁸ Levels of protection vary dramatically: marine reserves (Strict Nature Reserve (Category Ia) and National Parks (Category II)) enjoy the highest level of protection, with no extractive activities permitted. Levels of protection are lower in other categories, with Category VI permitting a wide range of extractive uses including commercial fishing and mining.⁶⁹

61 Gary W Allison, Jane Lubchenco, and Mark H Carr, 'Marine Reserves are Necessary But Not Sufficient for Marine Conservation' (1998) 8(1) *Ecological Applications* S79-S92; Tundi Agardy, Giuseppe Notarbartolo di Sciarra and Patrick Christie, 'Mind the gap: Addressing the shortcomings of marine protected areas through large scale marine spatial planning' (2011) 35 *Marine Policy* 226–232.

62 Convention on Biological Diversity, *Aichi Biodiversity Goals* <<https://www.cbd.int/sp/targets/>>. For guidance on establishing MPAs, see Graeme Kelleher, *Guidelines for Marine Protected Areas* (IUCN, 1999) <<https://portals.iucn.org/library/efiles/edocs/PAG-003.pdf>>.

63 Department of the Environment and Energy (Cth), *Australia's network of marine reserves* <http://www.environment.gov.au/system/files/pages/2ed9e96f-d06b-460b-81de-8cd11f2ea66f/files/national-map_0.pdf>.

64 Lissa Barr and Hugh Possingham, 'Are outcomes matching policy commitments in Australian marine conservation planning?' (2013) 42 *Marine Policy* 39, 43.

65 The network of marine reserves showing the South-west, North-west, North, Great Barrier Reef, Coral Sea, Temperate East, South-east, Heard Island and McDonald Island and their zoning can be accessed at Department of Environment (Cth), *Australia's network of Commonwealth marine reserves*, <http://www.environment.gov.au/system/files/pages/2ed9e96f-d06b-460b-81de-8cd11f2ea66f/files/national-map_0.pdf>.

66 ANZECC, *Guidelines for establishing the national representative system of marine protected areas* (1998) <<http://www.scw.gov.au/system/files/resources/378b7018-8f2a-8174-3928-2056b44bf9b0/files/anzecc-gl-guidelines-establishing-national-representative-system-marine-protected-areas-199812.pdf>>. For more on the CAR principles see Australian Panel of Experts on Environmental Law, *Terrestrial Biodiversity Conservation and Natural Resources Management Governance* (Technical Paper 3, 2017). The CAR criteria uses the Australian Government's 2006 *Integrated Marine and Coastal Regionalisation of Australia* (IMCRA v4.0) spatial framework for classifying Australia's marine environment into bioregions: Department of Sustainability, Environment, Water, Population and Communities, *A guide to the integrated marine and coastal regionalisation of Australia* (IMCRA version 4.0, 2006) <<http://www.environment.gov.au/system/files/resources/2660e2d2-7623-459d-bcab-1110265d2c86/files/imcra4.pdf>>.

67 Detail as to the IUCN categories that have been used in each reserve can be seen as follows: Department of Environment and Energy, 'Australia's network of Commonwealth marine reserves' <http://www.environment.gov.au/system/files/pages/2ed9e96f-d06b-460b-81de-8cd11f2ea66f/files/national-map_0.pdf>; see also Australian IUCN Reserve Management Principles, *Environment Protection and Biodiversity Conservation Regulations 2000* (Cth) schedule 8.

68 Nigel Dudley, *Guidelines for applying protected area management categories* (IUCN, 2008).

69 For more detail on the zoning system and implications for commercial stakeholders: Sarah Waddell, 'Implications of the proposed National Representative System of Marine Protected Areas' (2012) 27(8) *Australian Environment Review* 259.

National Reserve Systems and National Representative System of Marine Protected Areas

Collaborative Australian Protected Areas Database (2014)

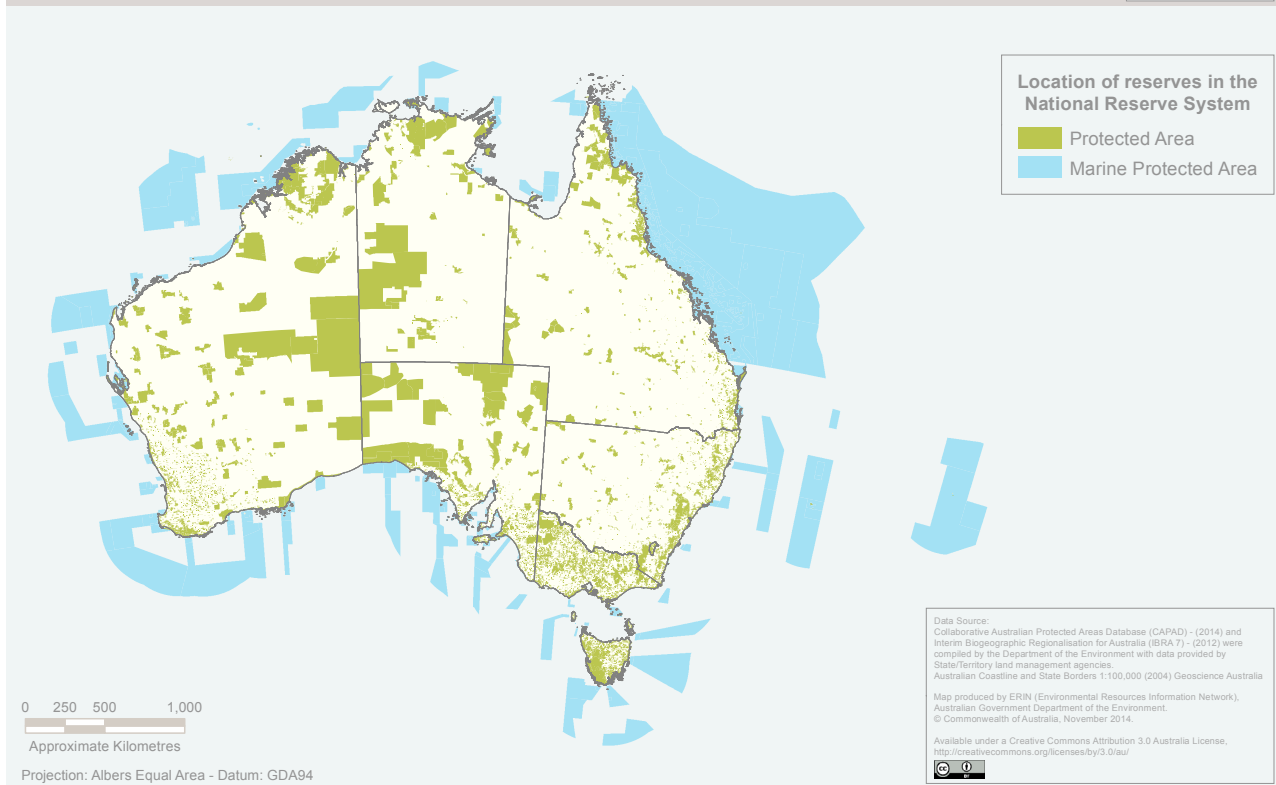


Figure 3: Marine protected areas and the national reserve system

Management plans were approved for the South-west, North-west, North and Temperate East reserve networks and the Coral Sea marine reserve, but were set aside so that new plans could be developed as part of the Australian Government's review of marine reserves.⁷⁰

The South-east region, which stretches from the far south coast of New South Wales, around Tasmania and Victoria, and west to Kangaroo Island off South Australia includes a network of 14 Commonwealth marine reserves. Its 2013 management plan is the only plan to have commenced operation and is not included in the review of marine reserves. In addition to the NRSMPA, the Commonwealth has established the Australian Whale Sanctuary – covering Commonwealth marine areas and State/Northern Territory waters prescribed by regulation. All whales and cetaceans are protected.

The governments of each state and the Northern Territory have also established MPAs. This has usually been done under fisheries law (to protect important habitat and nursery areas) or under specific marine parks legislation.⁷¹ Each MPA is intended to have a management plan specifying zones. Plans will stipulate permitted uses within each zone, including no-take zones for commercial and recreational fishing.⁷² No-take zones have been highly contentious in most states, with some opposition to establishing no-take zones and, in some instances, a significant lowering of protection.

⁷⁰ RJS Beeton et al., *Commonwealth Marine Reserves Review: Report of the Expert Scientific Panel* (Department of the Environment, Canberra, 2015) <<http://www.environment.gov.au/system/files/pages/23061bf8-df19-4b74-b867-5a57ccbc5c8b/files/cmrrreviewexpertscientificpanelreportfinal.pdf>>: The review recommends that all bioregions have at least one marine national park, that there should be greater protection for some coral reefs, and that restrictions on mining should be increased. On the other hand, it also recommends that 127000 of marine national park be removed from the network, representing a net loss of 76000 sq km, and a reduced level of protection by re-zoning 18 areas. Moreover, it is proposed that some marine national parks be relocated from the continental shelf to offshore areas, which are subject to far lower levels of human pressure. The Ocean Science Council of Australia has criticised the review findings for failing to recommend protection of at least 30% of each marine habitat from all extractive industries; see Jessica Meeuwig et al, 'Changes to Australia's marine reserves leave our oceans unprotected' *The Conversation*, 28 October 2016 <<https://theconversation.com/changes-to-australias-marine-reserves-leave-our-oceans-unprotected-65224>>.

⁷¹ For example, in NSW the *Marine Parks Act 1997* (NSW) and South Australia, the *Marine Parks Act 2007* (SA).

⁷² See for example, NSW Marine Parks Authority, *Marine Protected Areas* (2009) <<http://www.mpa.nsw.gov.au/pdf/NSW-Marine-protected-areas.pdf>>.

At both the state and Commonwealth levels, there remains a risk of additional regression in policy and legislative protections.⁷³

3.3.3 Conservation outside marine protected areas

While Australia's MPA estate has expanded in recent years, more than 60% of the Commonwealth marine area is not covered by the NRSMPA. Aside from marine bioregional planning mentioned above and the strategic assessment process that applies to Commonwealth fisheries under the *EPBC Act*,⁷⁴ use of marine resources in this area is governed by sectoral legislation. Biodiversity conservation measures are provided by the *EPBC Act* through the environmental assessment process for actions with a potential significant impact on a matter of national environmental significance (MNES). The *EPBC Act* may also be invoked in State/Northern Territory waters if a proposed action will, or is likely to, have a significant impact on a MNES. For coastal waters, relevant MNES include World Heritage, National Heritage, wetlands of international importance, listed threatened species and communities, and listed migratory species.⁷⁵ State/Northern Territory sectoral laws govern resource use in coastal waters. Biodiversity conservation measures may be triggered as part of environmental planning and development control, for example, where there is a requirement for a species impact statement to protect threatened species or populations known or likely to be in an area.⁷⁶

In relation to individual species protection, nationally there are special provisions for cetaceans – the more than 45 species of whales, dolphins and porpoises living in, and migrating through, marine areas under Australian national jurisdiction. The *EPBC Act* regulates actions that will have or are likely to have a significant effect on all listed, threatened or migratory species of cetaceans using the referral provisions.⁷⁷ The *Australian Whale Sanctuary* includes all Commonwealth waters.⁷⁸ Similar protection is provided in State/Northern Territory waters and the Australian government has committed to establishing a national network of whale and dolphin sanctuaries.⁷⁹ The *EPBC Act* is also used to protect and manage threatened, migratory and marine species more broadly,⁸⁰ including sea snakes, seals, dugong, marine turtles, and seahorses. Conservation of individual marine species under the *EPBC Act* will occur as part of the requirements for the Environment Minister to take steps to protect those listed species. This includes preparing conservation advices, recovery activities, recovery plans,⁸¹ determining key threatening processes (KTPs), preparing threat abatement plans (TAPs), and devising requirements for permits.

Threatened species legislation is also present at the State/Northern Territory level. Critical habitat may be declared under State/Northern Territory law which may include coastal habitat. State/Northern Territory processes include lists of species, communities and populations, KTPs, TAPs and similar measures which can be applied to the protection of species in the coastal environment. There are also offence provisions. If a species is listed under the *EPBC Act*, steps are taken to also list it under state legislation.⁸²

⁷³ Australian Committee for IUCN, above n 38, 7.

⁷⁴ *EPBC Act*, pt 10. Management plans for Commonwealth fisheries must undergo a strategic assessment process, using the *Guidelines for the Ecologically Sustainable Management of Fisheries*. Once a strategic assessment has been undertaken for a fishery, actions taken pursuant to the endorsed policy, plan or program are exempted from standard assessment processes, or subject to less demanding processes. Most fisheries management plans have bycatch policies aimed at protecting listed marine species.

⁷⁵ See for example, James Johnson, 'Commonwealth Environmental Assessment and Approval' in David Farrier and Paul Stein (eds), *The Environmental Law Handbook* (Thomson Reuters, 5th ed, 2011) 274-303.

⁷⁶ For example, the *Threatened Species Conservation Act 1995* (NSW).

⁷⁷ Whale species currently listed as nationally threatened are the Blue whale (endangered); Southern right whale (endangered); Sei whale (vulnerable); Fin whale (vulnerable); and Humpback whale (vulnerable). The primary threats are habitat destruction and whaling: Department of Environment and Energy (Cth), *Whale Conservation* <<http://www.environment.gov.au/coasts/species/cetaceans/conservation/index.html#plans>>.

⁷⁸ *EPBC Act*, s 225.

⁷⁹ Department of Environment and Energy (Cth), *Australian Whale Sanctuary* <<https://www.environment.gov.au/marine/marine-species/cetaceans/australian-whale-sanctuary>>.

⁸⁰ Department of Environment and Energy (Cth), *Marine Species Conservation* <<http://www.environment.gov.au/marine/marine-species>>.

⁸¹ There are conservation management plans for the blue whale and southern right whale; national recovery plans for several species of albatross and petrel; the Australian sea lion; the fur seal and elephant seal; the grey nurse shark; the great white shark; and a group of sawfish and river sharks: Department of Environment and Energy (Cth), *Species Profile and Threats Database* <<http://www.environment.gov.au/cgi-bin/sprat/public/publicshowallrps.pl>>.

⁸² For example, as stated under the *Threatened Species Conservation Act 1995* (NSW) s 9.

3.3.4 Critique of current framework

3.3.4.1 Lack of integrated multi-sectoral, ecosystem-based management

As noted in the previous section, the Commonwealth has retreated from the *Oceans Policy*'s goal to establish integrated multi-sectoral, ecosystem-based management of marine areas and has instead sought to rely on marine bioregional planning provided for under the *EPBC Act* in combination with the NRSMPA. This approach can be criticised as being too closely associated with the 'the environment sector', lacking a multi-sectoral planning and management approach, and only covering waters within the Commonwealth's jurisdiction.

Governance of extractive and other industries in coastal and marine areas continues to be sectorally-based, uncoordinated and inconsistent (across sectors and between states/territories), with inadequate mechanisms for resolving potential conflict between uses. Examples include competing interests of oil and gas exploration and fisheries, and tourism and port development. At present there are no standards or criteria by which these competing claims can be assessed. It is not surprising, therefore, that the *SoE Report 2011* concluded that '[t]he often-identified need for the integration of marine management is now critical and urgent'⁸³ and that the most significant and urgent challenge for policy makers is 'to establish an effective set of national arrangements to connect national and international policies with state and local management activities, and to involve communities and the private sector'.⁸⁴ The question that arises is whether the *EPBC Act* is capable of achieving these aspirations.

The current approach also has limited scope for considering cumulative impacts which are rapidly growing due to escalating impacts of climate change, population pressures, coastal development, globalisation of marine industries and risks from oil and gas extraction.⁸⁵ The expansion of oil and gas development in the north of Western Australia is a case in point, where each development is considered on its own merits without any regional strategic environmental assessment to guide planning and impact management systems.

The current marine bioregional planning process does not amount to MSP because it is tied to the approval process for an 'action' as set out in the *EPBC Act*; it only applies to Commonwealth waters, and does not provide for cross-sectoral planning. It does not address the interaction between land and sea or provide certainty through spatial allocation of permitted uses. The planning and management of the Great Barrier Reef World Heritage Area is perhaps Australia's best example of MSP as it consists of scaled strategic frameworks with consistent environmental standards and a robust framework for planning and approvals processes (including zoning) that provides certainty for conservation and resources use.⁸⁶ Whilst the NRSMPA may be classified as a form of MSP, as it includes zoning and permitted uses within each zone, when management plans are approved and implemented, they will apply to less than 40% of waters within the Commonwealth jurisdiction.

These weaknesses point to the need for comprehensive MSP of the kind advocated internationally, for all waters across jurisdictions and binding on all sectors operating in the coastal and marine environment.

3.3.4.2 Incomplete marine protected areas system

A general observation that can be made of MPAs in Australia is that the coverage is incomplete, especially in respect of the highest protection categories of 'marine reserve' (Sanctuary Zone – IUCN Ia and Marine National Park Zone – IUCN II). The CAR principles require that the full range of ecosystems and their diversity across each bioregion be represented within a MPA network,⁸⁷ but this is not being met. Rather, a pattern is emerging whereby marine reserves are being located in residual areas with the least promise for commercial use.⁸⁸ MPAs established by the

⁸³ State of the Environment 2011 Committee, above n 15, 458.

⁸⁴ Ibid.

⁸⁵ Ibid 373.

⁸⁶ Australian Committee for IUCN, above n 38, Key Direction 11.

⁸⁷ ANZECC, above n 66.

⁸⁸ B Pressey, 'Marine Protected Areas: Why they won't work', *The Conversation* (17 January 2013) <<https://theconversation.com/australias-new-marine-protected-areas-why-they-wont-work-11469>>.

Commonwealth, except for MPAs in the GBR and the Coral Sea, are said to be far from representative.⁸⁹ According to Barr and Possingham, of Australia's 85 marine bioregions, 30 have less than 1% of their area covered by marine reserves. Regarding IUCN categories I–VI, 36 bioregions have more than 30% protection, however four bioregions still have less than 1% coverage by MPAs.⁹⁰ Furthermore, there are no clear nationally-consistent guidelines for applying CAR principles to inform the prioritisation and selection of areas.⁹¹

The failure to set quantitative targets for MPAs (for example, stipulating a percentage of every marine bioregion that should be conserved) is restricting the achievement of representative marine protection.⁹² The current network has very few protected areas within the most degraded areas of the marine environment found closest to shore, particularly in the South-east and South-west regions, and the recent review is likely to exacerbate rather than cure this problem.⁹³ It has been observed that no-take zones have not been placed in the preferred sites for fishing, and oil and gas and are 'largely absent in "zones of importance" where high biodiversity conservation values overlap with greatest threats'.⁹⁴

There is also inadequate connectivity between MPAs, especially as between those established under Commonwealth and separate state/territory processes. There have been some attempts at inter-jurisdictional cooperation, but cross-shelf and inter-jurisdictional MPA planning to protect mutual biodiversity values and ecological processes is very limited.⁹⁵ The importance of the ecological impact of activities onshore and in coastal areas on the wider marine environment is widely accepted. While the Australian government is working with state and territory governments to set up a national system of protected areas throughout the entire marine zone, the current fragmented approach to marine planning and management remains a 'critical impediment' to adequate and representative conservation of Australia's marine environment.⁹⁶

3.3.4.3 Inadequate conservation measures outside the MPA system

While MPAs are necessary, they are not sufficient for the protection of marine biodiversity. Other measures are needed to account for the cumulative and diverse impacts of a wide range of extractive and non-extractive marine activities.

In relation to the *EPBC Act* provisions on species protection, of the 21 KTPs listed under the *EPBC Act*,⁹⁷ only four relate to marine species or environments, namely, incidental catch (bycatch) of sea turtle and seabirds during coastal otter-trawling operations and oceanic longline fishing operations respectively; injury to vertebrate marine life from harmful marine debris; and loss of climatic habitat from greenhouse gas emissions. Only two TAPs have been prepared: one targeting seabird incidental catches during ocean longline fishing operations and the other on the impact of marine debris on vertebrate marine life.⁹⁸

Conservation measures in coastal waters that arise as part of the development control process are likely to vary between State/Northern Territory governments as mentioned below at 3.4. There are also likely to be inconsistencies in relation to individual species protection measures. The whole arrangement, which includes protection for individual species and ecological communities at the national level and within each government at the state/territory level, appears to be unnecessarily complex and duplicative.

In practice, implementation of TAPs, conservation management plans and recovery plans has depended upon political will and funding. With over 1800 nationally-listed terrestrial and marine species, conservation effort and funding is prioritised. The principles guiding this prioritisation include the conservation status of the species (threatened,

⁸⁹ Barr and Possingham, above n 64, 39.

⁹⁰ Ibid 43.

⁹¹ State of the Environment 2011 Committee, above n 15, 440.

⁹² Barr and Possingham, above n 64, 39; however, they are of the view that the 2004 rezoning of the Great Barrier Reef remains a 'model to emulate'.

⁹³ This is readily apparent from the map of the NRSMPA: see Department of the Environment and Energy (Cth), *Australia's network of marine reserves*, above n 63.

⁹⁴ Pressey, above n 88.

⁹⁵ State of the Environment 2011 Committee, above n 15, 439.

⁹⁶ Ibid 440.

⁹⁷ Department of Environment and Energy (Cth), *Species Profile and Threats Database* <<http://www.environment.gov.au/cgi-bin/sprat/public/publicgetkeythreats.pl>>.

⁹⁸ Department of Environment and Energy (Cth), *Approved Threat Abatement Plans* <<http://www.environment.gov.au/biodiversity/threatened/threat-abatement-plans/approved>>.

endangered etc), uniqueness, importance to the environment and community, the scientific base supporting the action, likelihood of success, value for money, and the potential for multiple and co-benefits.⁹⁹ At present, 20 mammals and 21 bird species have been identified for priority interventions, but only three of these are marine or coastal species.¹⁰⁰ Most positive actions undertaken pursuant to recovery plans are non-binding, and many involve short-term interventions. The shortcomings of MPAs and the conservation of resources beyond MPAs are best addressed through large-scale MSP.

3.4 Coastal protection and management

Development along the coastline is governed by State/Northern Territory law. Coastal management regimes differ considerably between jurisdictions. In some states, coastal planning and protection is left primarily to planning and resource legislation and detailed policies, manuals and guidelines. New South Wales (NSW), Queensland, Victoria and South Australia have coastal management legislation that sets out specific regulatory requirements for activities affecting coastal ecosystems, especially relating to public access, public amenity, and coastal hazards. In other jurisdictions, coastal issues are left to specific planning policies or local environment plans, combined with the relevant provisions of waterways, catchment management, biodiversity conservation and protected area, and fisheries management legislation.¹⁰¹

Implementation generally relies on integration with other regulatory regimes, for example via the substantive rules and standards of land use planning regimes that restrict development in hazard zones. Each regime brings different considerations to bear. Tensions over how to control the phenomenon of strip development along the coastline, especially the populous eastern seaboard, address the impacts of coastal climate hazards, and manage the impact of erosion control and flood mitigation infrastructure on beach amenity and coastal ecosystem health are particularly fraught.¹⁰²

3.4.1 Critique of current arrangements for coastal protection and management

The myriad of national, state and local plans and policies potentially affecting the coastal zone, highlight the fragmentation and duplication of coastal zone management.¹⁰³ Federal, state and territory governments have given high level endorsement of a Framework for a National Cooperative Approach to Integrated Coastal Zone Management (ICZM), but the framework has never been properly funded and no agency been given specific responsibility for its implementation or delivery.¹⁰⁴ Over the many inquiries into coastal zone management since 1980 there have been repeated calls for more national leadership to prevent 'creeping degradation' of nationally important coastal values.¹⁰⁵ These calls have not yet been heeded.¹⁰⁶

At the state level, there is a lack of clarity over the coastal values to be prioritised through legal frameworks. In planning legislation, where factors for consideration in approving development in coastal areas are set

99 Commonwealth of Australia, *Threatened Species Strategy Action Plan 2015-16*, <http://www.environment.gov.au/biodiversity/threatened/publications/strategy-home-Action_Plan_2015-16>.

100 Department of the Environment (Cth), *20 Mammals by 2020* <<http://www.environment.gov.au/system/files/resources/332df2c1-61c1-4999-880b-02a6f674ad8e/files/factsheet-threatened-species-strategy-eight-additional-mammals.pdf>>; and Department of the Environment (Cth), *20 birds by 2020* <<http://environment.gov.au/biodiversity/threatened/publications/threatened-species-strategy-action-plan-2015-16-20-birds-2020>>; Department of the Environment (Cth), *Additional Initiative Christmas Island Frigatebird* <<http://www.environment.gov.au/system/files/resources/8ffd3139-6903-4dfc-bf3e-3b995e3f7135/files/factsheet-christmas-island-frigatebird.pdf>>.

101 Jan McDonald and Anita Foerster, 'Protecting coastal wetlands in a changing climate: reinvigorating integrated coastal zone governance' in Janice Gray, Cameron Holley and Rosemary Rayfuse (eds), *Trans-jurisdictional Water Law and Governance* (Routledge, 2016) 240.

102 Nick Abel et al, 'Sea level rise, coastal development and planned retreat: analytical framework, governance principles and an Australian case study' (2011) 14 *Environmental Science and Policy* 279; Tom Measham et al, 'Adapting to climate change through local municipal planning: barriers and challenges' (2011) 16 *Mitigation and Adaptation Strategies for Global Change* 889; Kerry Lee Rogers, Neil Saintilan, and Craig Copeland, 'Managed Retreat of Saline Coastal Wetlands: Challenges and Opportunities Identified from the Hunter River Estuary, Australia' (2014) 37 *Estuaries and Coasts* 67.

103 Barbara Norman, *Planning for Coastal Climate Change: an Insight into International and National Approaches* (Prepared for Department of Planning and Community Development and Department of Sustainability and Environment (Vic), 2009).

104 Jenny George et al, *Managing our coastal zone in a changing climate: The time to act is now*, House of Representatives Standing Committee on Climate Change, Water, Environment and the Arts, Parliament of Australia (2009) 251.

105 State of the Environment 2011 Committee, above n 15, 871.

106 George et al, above n 104, 12.

out, ESD may be referred to, but rarely is there explicit reference to the protection of marine biodiversity and ecosystem health.¹⁰⁷ No jurisdiction formally requires integrated coastal zone planning.¹⁰⁸ Even where development approval processes consider protection of the coastal environment, for example, by imposing conditions to prevent runoff or loss of a particular coastal ecological community, rarely are cumulative impacts adequately accounted for.

The inadequacies of current approaches to coastal zone management will be exacerbated by climate change impacts. Coastal erosion, coastal inundation, storm surge and flooding will affect public and private infrastructure and coastal ecosystems that are already under stress from increased coastal development. There has been significant research and local and state-based policy activity directed towards adaptation of the coastal zone to the impacts of climate change.¹⁰⁹ Many local governments have developed coastal adaptation plans, but these generally adopt a 'wait-and-see' approach because of the high cost of strategies such as engineered protection works or planned retreat. Stronger measures have faced resistance and roll-back.¹¹⁰ Many local governments fear exposure to legal liability for adaptation decisions and have called for stronger guidance from state governments. There have been consistent calls for a national framework for coastal climate change adaptation that clearly sets out roles and responsibilities and identifies the key principles on which decision-making should occur. This is another area where national leadership could promote more consistent decision-making in areas facing similar adaptation challenges, and where integrated strategic bioregional planning could resolve potential conflicts.

3.5 Marine biosecurity

Marine biosecurity is currently addressed through the *National System for the Prevention and Management of Marine Pest Incursions* (the *National System*), which deals with prevention of the arrival and spread of new pests. Since 2002, the *Quarantine Act 1908* (Cth) has imposed mandatory ballast water requirements for international vessels. No 'high risk' ballast water - defined as any water from beyond Australia's EEZ - may be discharged into Australian waters or ports,¹¹¹ with the practical effect that international vessels must exchange 95% of their ballast at sea. The *National System* contemplates a coordinated approach to ballast water management between domestic ports, but only Victoria currently imposes a requirement that vessels submit a ballast management plan, and obtain approval of the Environment Protection Authority (EPA).¹¹² Invasive species may also arise through biofouling of vessels. Biofouling is currently subject to voluntary regulation: voluntary biofouling management guidelines have been developed for a range of marine sectors, providing practical maintenance recommendations to help vessel operators manage the level of biofouling on their vessels.¹¹³

The *National System* also contains emergency management arrangements when a new pest outbreak is detected, and provides for the implementation of national control plans to limit the spread and impact of established invasive species. **National control plans** have been developed for six pests with significant impacts on the coastal and marine environment or marine industries.¹¹⁴

107 Although complementary planning policies, or equivalent, may specifically require the consideration of these factors: see for example, *State Planning Policy 2016* (Qld) 28.

108 Although the new *Coastal Management Act 2016* (NSW) requires the preparation of coastal management programs (CMPs), to give effect to the management objectives for the four coastal management areas.

109 Justine Bell, *Climate Change and Coastal Development Law* (Federation Press, 2015); Anita Foerster, Andrew Macintosh and Jan McDonald, 'Transferable lessons for climate change adaptation planning? Managing bushfire and coastal climate hazards in Australia' (2013) 30 *Environmental and Planning Law Journal* 469; Jan McDonald, 'The Ebb and Flow of Coastal Adaptation in Australia', in Randall Abate (ed), *Climate Change Impacts on Ocean and Coastal Law* (Oxford University Press, 2015) 627.

110 Anita Foerster, Andrew Macintosh and Jan McDonald, 'Trade-Offs in Adaptation Planning: Protecting Public Interest Environmental Values' (2015) 27 *Journal of Environmental Law* 459.

111 Department of Agriculture (Cth), *Seaports Program Australian Ballast Water Management Requirements Version 5* (2013).

112 *Waste Management Policy (Ships' Ballast Water) 2004* (Vic); *Environment Protection (Ships' Ballast Water) Regulations 2006* (Vic).

113 Western Australia and the Northern Territory have more stringent vessel screening requirements.

114 The Northern Pacific seastar, the European green shore crab, the Asian bag mussel, the European fan worm, Japanese seaweed and the European clam.

3.5.1 Critique of current arrangements regarding marine biosecurity

Although ballast water protocols are in place, they are not universally robust. There is a case for shifting to more formal regulation of ballast and biofouling activities. Greater support for strong and nationally consistent policy measures is needed, including rapid response capacity to manage new invasions or outbreaks. While a significant body of research is underway to ascertain the impacts of climate change on the movement of marine species, including potential invasive species, current frameworks do not make special provision for this additional stressor.

3.6 Marine pollution

Responsibility for management of marine pollution is spread across of all levels of government. The Commonwealth *National Water Quality Management Strategy* 1992 (NWQMS) aims '[t]o achieve sustainable use of the nation's water resources by protecting and enhancing their quality while maintaining economic and social development'.¹¹⁵ The *Australian and New Zealand Guidelines for Fresh and Marine Water Quality* (2000) and the *Framework for Marine and Estuarine Water Quality Protection: A Reference Document* (2002) (the *Framework*) provide uniform national guidelines for reducing land-based pollution.¹¹⁶ The *Framework* implements key elements of the NWQMS and is said to provide a nationally consistent approach to coastal water quality protection. The *Framework* guides development of *Water Quality Improvement Plans* (WQIPs) for hotspot coastal waterways that are threatened by pollution.

In relation to point source pollution, state governments play the major role though the licensing and management of major point sources. State and Northern Territory governments may issue their own water quality objectives setting out agreed environmental values and long-term goals.

Non-point source pollution from sediment, nutrients and pesticides that comes from river run-off and storm water flows (and which particularly affects mangrove wetlands, shallow reefs and beaches and inshore waters)¹¹⁷ is also monitored by state and territory governments (for example, for turbidity and chlorophyll-a) and in accordance with national guidelines. Beach watch programs may also monitor recreational water quality.¹¹⁸ There is a lack of consistent and reliable data.¹¹⁹

State governments have taken steps to reduce this form of pollution through the release of planning policies and strategies, coastal protection policies, coastal wetland policies, state-wide targets and so on. They may also devise tools to assist in managing particular coastal areas such as estuaries and initiate programs to manage and prevent pollution incidents. For example, in relation to the impact of non-point source pollution on the GBR, since 2003, the Queensland and Australian governments have jointly worked on *Reef Water Quality Protection Plans*. The 2013 update set water quality targets for reductions in river loads of dissolved inorganic nitrogen (50%), sediment (20%) and pesticides (60%) by 2018.¹²⁰ Natural Resource Management/Catchment Management Authorities may develop action plans describing the approach to be adopted to meet state-wide targets and can also set regional targets.¹²¹

However, local government will often play a key role through a variety of mechanisms including land-use and strategic planning, development controls and policies affecting water utilities and water quality management, including sewage and storm water management strategies and coastal management plans.¹²²

Marine debris, which includes MPP, is listed as a KTP for at least 20 endangered and vulnerable marine vertebrate

115 Department of the Environment (Cth), *National Water Quality Management Strategy* <<http://www.environment.gov.au/water/quality/national-water-quality-management-strategy>>.

116 Department of the Environment (Cth), *Water Quality Framework* <<http://www.environment.gov.au/water/publications/quality/water-quality-framework>>.

117 State of the Environment 2011 Committee, above n 15, 414.

118 For example in NSW: Environment Protection Agency (NSW), *NSW State of Environment Report 2012* <http://www.epa.nsw.gov.au/soe/soe2012/chapter4/chp_4.6.htm>.

119 Ibid.

120 Queensland Government, *Reef Water Quality Protection Plan* <<http://www.reefplan.qld.gov.au/about/>>.

121 Environment Protection Agency (NSW), above n 118.

122 Ibid.

species under the *EPBC Act*. The 2009 TAP,¹²³ includes a long list of action items that the Commonwealth was to either carry out or coordinate over the period from 2009–2014. Implementation has been reviewed in the TAP Review Report,¹²⁴ and in many instances has been found to be inadequate.

State and territory responsibility for marine debris will often take the form of support for research, waste management policy,¹²⁵ as well as clean up and debris removal. State governments are responsible for the implementation of schemes for waste minimisation and recycling and different schemes have been established in each state with varying success.

Storm water outlets (litter, plastic, and other pollutants) are managed by local councils often with a huge cost burden.¹²⁶ Many councils have installed Gross Pollutant Traps (GPTs) which are cage-like constructions installed at the outlets of storm water systems that are periodically cleared. These structures vary in design and will not always catch smaller plastic items such as straws and bottle tops. The cost of maintaining these structures is high, but if they are not cleared in time before heavy rain the collected rubbish may spill out into the coastal water area.¹²⁷ Local councils may also have specific programs for removing waste from river catchments and may have environment restoration plans supported by an environment levy for the clean-up of waste from program sites.¹²⁸

3.6.1 Critique of current arrangements for management of marine pollution

Despite the existence of a national framework document for marine and estuarine water quality standards, different measures and approaches have been adopted around the country. The control of sediment, nitrogen and pesticide runoff to protect the GBR has taken the form of voluntary plans for farmers and this has led to only modest changes in agricultural management practices. Previous targets have not been met and current 2018 targets are unlikely to be met.¹²⁹

At the national level, implementation of measures to control the spread of marine debris has been disappointing. For example, at the time of writing, only two jurisdictions have container deposit schemes (CDS).¹³⁰ In May 2016, NSW announced that it would commence a CDS from July 2017,¹³¹ and it appears likely that Queensland will follow NSW.¹³² Whilst the trend towards adoption of CDS is encouraging, it is not being coordinated nationally.

Many local government responses are necessarily reactive. Some have called for the need for more strategic federal or state-wide programs and allocation of resources to target plastic pollution.¹³³ The lack of an Australian standard for composting or biodegradability of plastics is also problematic. The *Product Stewardship Act 2011* (Cth) enables extended producer responsibility and could be used to support the goals of reducing levels of plastic waste that enters the environment, however to date this approach has not been effective.¹³⁴

The issues posed by the growing prevalence of microplastic in the marine and coastal environment have only recently started to gain attention. Whilst this issue is likely to need national funding and support to review existing knowledge

123 Department of the Environment (Cth), *Threat Abatement Plan for the impacts of marine debris on vertebrate marine life* (May 2009) <<https://www.environment.gov.au/system/files/resources/d945695b-a3b9-4010-91b4-914efcdbae2f/files/marine-debris-threat-abatement-plan.pdf>>.

124 Department of the Environment (Cth), *Threat Abatement Plan for the impacts of marine debris on vertebrate marine life: Review 2009–2014* <<https://www.environment.gov.au/system/files/resources/d945695b-a3b9-4010-91b4-914efcdbae2f/files/tap-review-marine-debris.pdf>>.

125 Commonwealth, state and territory governments have addressed the issue of waste policy. For example, in 2009 Australia's environment ministers released the *National Waste Policy: Less waste, more resources* which sets an agenda for a nationally coordinated approach to waste management and resource recovery.

126 Senate Standing Committees on Environment and Communications, above n 33, 6.25 – 6.26; see also Georges River Combined Councils Committee (GRCCC) Submission No. 17 to Senate Standing Committee on Environment and Communications, Parliament of Australia, *Inquiry into 'The Threat of Marine Plastic Pollution in Australia'*, 12 September 2015 <http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Environment_and_Communications/Marine_plastics/Submissions>.

127 Liverpool City Council, Submission No 61 to Senate Standing Committee on Environment and Communications, Parliament of Australia, *Inquiry into 'The Threat of Marine Plastic Pollution in Australia'*, 2 October 2015, 1.

128 Ibid 3; Senate Standing Committees on Environment and Communications, above n 33, 6.27.

129 Frederieke Kroon and Britta Schaffelke, 'Great Barrier Reef pollution controls are not enough: here's what we can do', *The Conversation*, 3 April 2016 <<https://theconversation.com/great-barrier-reef-pollution-controls-are-not-enough-heres-what-we-can-do-52861>>.

130 South Australia and Northern Territory: Senate Standing Committees on Environment and Communications, above n 33, 6.43.

131 NSW Environmental Protection Agency, *NSW container deposit scheme* <<http://www.epa.nsw.gov.au/waste/container-deposit-scheme.htm>>.

132 Marine Samson 'Container deposit scheme will happen for Queensland' on *Government News* (6 June 2016) <<http://www.governmentnews.com.au/2016/06/container-deposit-scheme-will-happen-queensland/>>.

133 Liverpool City Council, above n 127, 3.

134 Senate Standing Committees on Environment and Communications, above n 33, ch 7.

in relation to the sources, location, density and likely harm caused by microplastic pollution in Australia, public awareness of the extent of the problem is lacking. Significant benefits could flow from a coordinated public awareness campaign to prevent litter and foster proper disposal of plastic waste.

3.7 Indigenous sea country governance

Native title rights and interests within both Commonwealth and coastal waters are capable of being recognised under the *Native Title Act 1993* (Cth).¹³⁵ The definition of native title includes rights and interests that are applicable to both land and waters.¹³⁶ Non-exclusive native title rights that have been successfully claimed include the right to fish, the right to hunt and the right to gather food (for domestic or commercial purposes).¹³⁷ Consent determinations and *Indigenous Land Use Agreements* have also confirmed non-exclusive rights over waters.¹³⁸ The right to protect places of cultural significance, the right to engage in trade, to claim subsoil of the seabed and rights to exclusive use of resources have been rejected on the basis that they can be characterised as a claim to rights of exclusivity.¹³⁹

Country-based indigenous engagement in land and sea management is becoming more widespread,¹⁴⁰ through a range of mechanisms. Some, such as Queensland's *Traditional Use of Management Resource Agreements*, are unique to one jurisdiction, but the most common mechanism is the establishment of Indigenous Protected Areas (IPAs).¹⁴¹ An IPA is an area of indigenous-owned land or sea where the traditional owners have voluntarily entered into an agreement with the Australian Government to promote biodiversity and cultural resource conservation.¹⁴² It may cover several protected areas across land and sea that are managed by a number of agencies. Sea country IPAs have been funded through a pilot funding program, but there is no coordinated mechanism or legal threshold for their establishment and establishment is voluntary. Accordingly, Sea country IPAs may overlap with NRSMPA reserves but, unlike their terrestrial counterparts, they do not form part of the NRSMPA.¹⁴³ The NRSMPA guidelines include the goal of providing for the 'recreational, aesthetic, and cultural needs of indigenous and non-indigenous people'. They also provide that the interests of indigenous people should be 'recognised and incorporated' in the development of the NRSMPA.¹⁴⁴

3.7.1 Critique of current framework for recognition of sea country

Indigenous leaders have stated that sea country aspirations are still not being met and a more holistic view of sea management needs to be adopted that includes people and culture.¹⁴⁵ Currently there is no consistent national, state/territory or regional policy framework for IPAs, including criteria by which to identify suitable sites. The voluntary nature of these arrangements introduces a degree of uncertainty about their long-term viability.¹⁴⁶ Other challenges include the need to clarify how IPAs in sea country are to contribute to the NRSMPA, including potential conflicts between zoning designations and uses of sea country IPA areas, how to deal with prospects of leadership change at the government and community levels and sources of support for capacity building.¹⁴⁷ More broadly, the mix of management mechanisms best suited to indigenous governance of sea country requires closer attention.¹⁴⁸

¹³⁵ Section 6 defines 'Waters' to include both internal waters, coastal waters and waters to which Australia asserts jurisdiction under its offshore legislation.

¹³⁶ *Native Title Act 1992* (Cth) s 223; Samantha Hepburn 'Native Title in Coastal and Marine Waters' in Rachel Baird and Donald R Rothwell (eds), *Australian Coastal and Marine Law* (Federation Press, 2011) 300.

¹³⁷ *Akiba FC* (2010) FCR 1, 185.

¹³⁸ Lauren Butterly, 'Changing Tack: *Akiba* and the way forward for Indigenous Governance of Sea Country' (2013) 17 *Australian Indigenous Law Reporter* 2, 9.

¹³⁹ *Ibid* 307-12.

¹⁴⁰ Dermot Smyth and Hanna Jaireth, 'Shared governance of protected areas: recent developments' (2012) 2 *National Environmental Law Review* 55, 55.

¹⁴¹ *Ibid* 56.

¹⁴² Government of Australia, *Australia's Indigenous Protected Areas* (2015) <https://www.dpmc.gov.au/sites/default/files/publications/IPA_FS_2015_2.pdf>.

¹⁴³ ANZECC Taskforce on Marine Protected Areas, *Guidelines for Establishing the National Representative System of MPAs* (December 1998) 4; Butterly, above n 138, 12.

¹⁴⁴ Butterly, above n 138, 13; ANZECC Taskforce on Marine Protected Areas, above n 143, 133.

¹⁴⁵ Chels Marshall, 'True Blue: Progress, Challenges and Opportunities for Australia's Marine Environment' (Presentation delivered at the ACIUCN Symposium, June 2013) as noted in Sarah Waddell 'Reflections on an important symposium: the governance challenge for Australia's marine environment' (2013) 2 *National Environmental Law Review* 49, 56.

¹⁴⁶ Smyth and Jaireth, above n 140, 61.

¹⁴⁷ Comments made by Dermot Smyth and Phil Rist at the ACIUCN June 2013 Symposium 'True Blue: Progress, Challenges and Opportunities for Australia's Marine Environment' as noted in Sarah Waddell 'Reflections on an important symposium: the governance challenge for Australia's marine environment' (2013) 2 *National Environmental Law Review* 49, 56.

¹⁴⁸ Butterly, above n 138, 14.

4. Reform proposals

This *Technical Paper* has described and critiqued the major components of the complex law and governance framework directed at minimising the impacts of a range of threats to the marine and coastal environment. Based on the foregoing critique, the reform proposals outlined in this part focus first on common themes and structural issues that should be addressed as a matter of priority. It then makes recommendations specific to particular concerns. The recommendations take into account and adopt a number of the recommendations contained in the 2013 *IUCN Key Directions Statement for Conserving Australia's Marine Environment* that was prepared in consultation with 100 multi-disciplinary marine experts.¹⁴⁹

4.1 A national vision for coastal and marine management

The key over-arching recommendation is for the Commonwealth to work with all jurisdictions, marine-based industry sectors, scientists, the community and other stakeholders to develop a **new national vision** for the planning, protection and management of Australia's coastal and marine environment, supported by clearly articulated priorities, objectives, and cross-jurisdictional coordination mechanisms.¹⁵⁰ This will require stronger leadership from the Commonwealth on coastal and marine affairs, reinforced by various mechanisms to secure the cooperation of the state and Northern Territory governments with respect to implementation of the new national vision.¹⁵¹ The nature of these mechanisms is examined in detail in Australian Panel of Experts on Environmental Law, *Environmental Governance* (Technical Paper 2, 2017).

A critical feature of such a vision is the need for clearly-defined objectives and associated performance measures.¹⁵² These are necessary for making choices between potentially competing uses of marine and coastal resources and assessing the performance of protection regime. Examples of specific, measurable, achievable, relevant or realistic and time-bound (SMART) objectives for marine conservation, include halting the decline in species numbers in a particular locality or the adoption of an ecosystem recovery target based on specific indicators.¹⁵³

RECOMMENDATION 4.1

The Commonwealth to pursue agreement on a nationally-agreed vision for managing Australia's marine and coastal environment, with clearly-defined objectives and priorities, and measurable outcomes capable of supporting economic sectors reliant on the marine and coastal environment, ecosystem integrity and resilience, and ongoing enjoyment by the public (including anticipatory measures with respect to the impacts of climate change).

¹⁴⁹ Australian Committee for IUCN, above n 38.

¹⁵⁰ Ibid Key Direction 3, 10. See also Baird, above n 45, 49-50; Donald R Rothwell and Stuart Kaye, 'A Legal Framework for Integrated Oceans and Coastal Management in Australia' (2001) 18 *Environmental and Planning Law Journal* 278, 281.

¹⁵¹ Katherine Wells and Amanda Cornwall, 'Managing Australia's Ocean Resources: the next step' (2012) 37(2) *National Environmental Law Review* 39, 42.

¹⁵² An objective can be defined as 'a specific statement of desired outcomes that represents the achievement of a management goal'. In a system of marine spatial planning, objectives should be linked to an appropriate indicator(s) and an associated target(s)': Ehler Charles, 'A Guide to Evaluating Marine Spatial Plans' (UNESCO, 2014) 22.

¹⁵³ Ibid 22-24.

4.2 Integrated marine spatial planning across sectors and levels of government

In the same way as strategic bioregional planning is advocated for terrestrial resources in Australian Panel of Experts on Environmental Law, *Terrestrial Biodiversity Conservation and Natural Resources Management Governance* (Technical Paper 3, 2017), MSP is considered here to be the best means by which to account for current and future resource needs and pressures and cumulative impacts and to facilitate broad stakeholder support. MSP contemplates **‘a public process of analyzing and allocating the spatial and temporal distribution of human activities in marine areas to achieve ecological, economic and social objectives that have been specified through a political process’**.¹⁵⁴ As a process, it is ecosystem-based, balancing ecological, economic, and social goals and objectives toward sustainable development; it is integrated, across sectors and agencies, and among levels of government; and it is place-based, adaptive, strategic, anticipatory, and participatory. **Since a key outcome of MSP is mapping and appropriate zoning for resource use and conservation,¹⁵⁵ it is able to integrate control over resource use with ongoing management, and provide a form of regulation for the coastal and marine environment.**¹⁵⁶

Implementation of comprehensive cross-jurisdictional MSP will need statutory support, such as a national Oceans Act or similar legislation, and may require implementation by a specific agency, such as a National Oceans Commission.¹⁵⁷ The Commonwealth’s role in MSP is critical, especially in areas where bioregions span two or more jurisdictional boundaries. Ways of encouraging indigenous stakeholders, industry and community engagement in planning and management also will be needed.¹⁵⁸

The alternative to establishing a cross-jurisdictional system of MSP would be to improve informal coordination mechanisms between levels of government and fully exploit the scope of current provisions in the *EPBC Act* for strategic assessments and bioregional planning. This approach has the benefit of avoiding the establishment of new bureaucracies, but is unlikely to deliver the mandate needed for implementation across sectors and jurisdictions.

More integrated planning and management is also required in the coastal zone to effectively respond to existing stressors, future development, and climate change impacts. Properly designed, a national framework for MSP should be broad enough to also cover the coastal zone. In practice, the way in which integrated coastal zone planning is implemented may vary depending on the context for each coastal region. Goals and objectives for each coastal precinct are needed, as this will help determine the priorities to be accorded to conservation, urban or other uses. In particular, there is a need for clearer guidance and national consistency on how to prepare coastal regions for the impacts of climate change. There is also an important role for indigenous rights holders in coastal zone management.

While MSP should resolve tensions between competing uses of marine areas, it is also important that extractive industries such as fishing, offshore oil and gas and sea-bed mining are subject to the highest standards of environmental protection.¹⁵⁹

154 UNESCO, *Marine Spatial Planning Initiative MSP FAQ* <http://www.unesco-ioc-marinesp.be/mssp_faq>.

155 For example, *Directive 2014/89/EU of the European Parliament and of the Council of 23 July 2014 establishing a Framework for Maritime Spatial Planning* [2014] OJ L 257/135, art 8(1): ‘When establishing and implementing maritime spatial planning, Member States shall set up maritime spatial plans which identify the spatial and temporal distribution of relevant existing and future activities and uses in their marine waters’. <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2014.257.01.0135.01.ENG>.

156 UNESCO, above n 154.

157 Chris Smyth et al, ‘Out of the Blue – an Act for Australia’s Oceans’ (Australian Conservation Association, Australia 2006) <<http://ro.uow.edu.au/cgi/viewcontent.cgi?article=2680&context=lhapapers>>; Joanna Vince, ‘Ten years of implementing Australia’s Oceans Policy: From an integrated approach to an environmental policy focus’ [2008] 159 *Maritime Studies* <http://eprints.utas.edu.au/6840/1/MS_159_Vince.pdf>; Wells and Cornwall, above n 151, 42; Australian Committee for IUCN, above n 38, Key Direction 3.

158 Australian Committee for IUCN, above n 38, Key Direction 3.

159 Australian Committee for IUCN, above n 38, Key Direction 13.

RECOMMENDATION 4.2

The Commonwealth to lead and implement a comprehensive system of marine spatial planning (MSP). Such a system will need to take a strategic approach that is ecosystem and place-based, participatory, adaptive, and that which integrates the needs of different sectors and agencies, and different levels of government. It will also need to address the land-sea divide and include coastal zone planning, noting the mechanisms for delivering coastal zone management may differ from those for the marine environment. MSP undertaken by the Great Barrier Reef Marine Park Authority provides a world-recognised example of how this may be achieved.

4.3 Addressing gaps and weaknesses in the national system of marine protected areas

The system of MPAs developed across various jurisdictions **needs to be completed to ensure that the MPAs are truly comprehensive, adequate and representative**. The errors of terrestrial planning should not be repeated by reserving 'residual' areas for conservation, that is, the areas of least promise for commercial use.¹⁶⁰ The CAR principles need to be consistently applied through coordinated action between Commonwealth and state/territory governments. There needs to be a strong focus on protection of underrepresented ecosystems particularly in already heavily exploited or degraded areas closer to the coast and along the continental shelf. **Connectivity** and the importance of areas in facilitating adaptation to climate change should also be a primary consideration in establishing MPAs, particularly when authority is shared at the state/territory level or divided between the Commonwealth and States/Northern Territory.¹⁶¹

As part of the system of MPAs, there need to be places in the marine environment that are permanently off limits to damaging human activity.¹⁶² Places of high biodiversity or cultural values should become IUCN Category Ia or II. Where this is not possible, they should be recognised as critical marine habitat under other instruments that afford permanent protection.¹⁶³

As part of extending the system of MPAs across jurisdictions, **sea country needs to be formally recognised** in coastal and marine areas that are of cultural significance to indigenous communities, with extended arrangements for indigenous management. There is a significant unrealised opportunity to enhance management of coastal waters through deeper integration of indigenous sea country rights. This may take a range of forms, but has the potential to help fill gaps in the coverage of the NRSMPA while also delivering co-benefits through, for example, IPA agreements.

National standards for effective MPA management is also required across state/territory and national jurisdictions that accord with IUCN standards.¹⁶⁴ Zoning of MPAs should be driven by evidence-based conservation priorities. There should be a template for ongoing monitoring of conservation achievements, including status of biodiversity. Where a coastal or marine ecosystem extends beyond the jurisdictional boundaries of a single government, measures will need to be designed by which governments can coordinate or collaborate in the management of coastal and marine ecosystems.

Outside MPAs, Australia's marine species enjoy higher levels of individual protection under the *EPBC Act* than many

¹⁶⁰ Australian Committee for IUCN, above n 38, Key Direction 6 citing Pressey B, above n 88.

¹⁶¹ Australian Institute of Marine Science, 'Great Barrier Reef no-take marine reserves protect much more than just fish' (Media Release, 4 April 2016) <http://www.aims.gov.au/docs/media/latest-releases/-/asset_publisher/8Kfw/content/04-April-Great-Barrier-Reef-no-take-marine-reserves-protect-much-more-than-just-the-fish>.

¹⁶² Including reefs, seamounts, underwater canyons, shark aggregation sites, cetacean feeding, breeding, calving and nursing areas, turtle nesting sites and bird breeding colonies and areas of sacred importance to indigenous peoples.

¹⁶³ Australian Committee for IUCN, above n 38, Key Direction 12.

¹⁶⁴ Australian Committee for IUCN, above n 38, Key Direction 6; Australian Panel of Experts on Environmental Law, *Environmental Governance* (Technical Paper 2, 2017) proposes that national standards should be developed by the Commonwealth, and supported by mechanisms to ensure their implementation by the States and Territories.

terrestrial species, but as noted previously, this protection primarily arises in response to development proposals or applications for approval for activities likely to have significant impacts. The investment in conservation efforts for listed marine species is minimal, and there is little in the way of active habitat management or restoration. This is less a question of weaknesses in the law itself and more a question of how best to fund priority conservation activities for listed species.

APEEL is of the opinion that the Commonwealth should take the lead in pursuing these recommended actions and work closely with the states to achieve the desired outcomes. Australian Panel of Experts on Environmental Law, *Environmental Governance* (Technical Paper 2, 2017), explores various means by which the Commonwealth might exercise such a leadership role.

RECOMMENDATION 4.3

The Commonwealth to lead a national effort to ensure the completion of planning, establishment and management for the National Reserve System for Marine Protected Areas (NRSMPA), with the identification and zoning of new areas to be based on scientifically-robust criteria, sound application of the CAR principles (comprehensive, adequate and representative) to establish a national network incorporating state and territory marine protected areas (MPAs), and national guidelines for MPA management.

4.4 Stronger measures for prevention and control of marine pollution

Once pollutants reach the sea, their movement defies jurisdictional boundaries. On this basis, a stronger national role in combatting marine pollution is required, by having the Commonwealth set national standards for water quality, with state legislation aimed at implementation. Australian Panel of Experts on Environmental Law, *Environmental Governance* (Technical Paper 2, 2017) sets out a framework for the pursuit of such an approach.

In relation to **non-point source pollution from agricultural practices**, options extending beyond voluntary measures may be needed to improve water quality, particularly on the GBR. More effective regulation of agricultural land uses and management is likely to be required. Crops that need a large amount of fertiliser may need to be changed and high-risk agricultural land may need to be retired as a tool for reducing land-based pollution.¹⁶⁵ Progress on these reforms requires a mix of regulatory interventions and incentive-based approaches, and will involve a partnership between federal and state governments and land owners.

MPP requires specific additional measures. A national strategy is needed that acknowledges the problem of MPP and generates wider public awareness of how Australia can reduce plastic consumption and help prevent plastic pollution from entering waterways and marine areas. Nationally-consistent programs to reduce plastic pollution are also required, with a clear role for the Commonwealth in funding such programs.¹⁶⁶ In coordinating this approach, the Commonwealth could aim to design an effective low-cost approach that could be widely adopted across Australia.¹⁶⁷

Policy making to address threats posed by **microplastic** marine pollution should be treated as a distinct issue. The Australian Government should lead a national effort with policy measures such as awareness campaigns, product

¹⁶⁵ Kroon and Schaffelke, above n 129.

¹⁶⁶ As identified in Department of the Environment, *Threat Abatement Plan for the impacts of marine debris on vertebrate marine life* (May 2009) TAP - Action1.12, <<https://www.environment.gov.au/system/files/resources/d945695b-a3b9-4010-91b4-914efcdbae2f/files/marine-debris-threat-abatement-plan.pdf>>.

¹⁶⁷ Again, Australian Panel of Experts on Environmental Law, *Environmental Governance* (Technical Paper 2, 2017) outlines how such an approach could be pursued by the Commonwealth.

content labelling, and legislative provision for the substitution and phasing-out of microbeads where manufactured locally, and restrictions on the import of products containing such content. In relation to microfibers, other measures may be required in addition to labelling requirements, such as standardised washing machine filters to catch microfibers from entering wastewater streams and the marine environment.

RECOMMENDATION 4.4

The Commonwealth to lead a national effort to develop stronger measures for the prevention and control of marine pollution including damage to ecosystems from coastal development, particularly land-based sources of pollution affecting the Great Barrier Reef (GBR) and marine plastic pollution (MPP).

4.5 Stronger measures to address the problem of invasive species

As mentioned above, although ballast water protocols are in place, they are not universally robust. Policy measures need to be strengthened and made nationally consistent. They need to include building capacity for rapid response to manage new invasions or outbreaks.¹⁶⁸ Current frameworks should also formalise more responsive and adaptive approaches to the assessment of climate-induced shifts of potential marine pests.

RECOMMENDATION 4.5

The Commonwealth should adopt more robust approaches to marine biosecurity, including nationally consistent ballast water protocols, and an enhanced capacity for rapid responses to manage new invasions or outbreaks.

4.6 A funding model for coastal and marine conservation

The process for MSP will be resource-intensive and may lead to zonings that require more active management. Even though marine planning does not require the same imposts on private property that active land stewardship may entail, both the process and outcome of MSP and completion of the NRSMPA will require additional funding. Careful consideration to the unique features of the marine environment will be needed to develop a funding model for marine conservation that is sustainable and overcomes issues relating to the shared nature of marine resources and the difficulties of enforcement. Note, in this context, the similar recommendation made in Australian Panel of Experts on Environmental Law, *Terrestrial Biodiversity Conservation and Natural Resources Management Governance* (Technical Paper 3, 2017) and the discussion of funding options presented in Australian Panel of Experts on Environmental Law, *Environmental Governance* (Technical Paper 2, 2017).

¹⁶⁸ Australian Committee for IUCN, above n 38, Key Direction 14.

RECOMMENDATION 4.6

The Commonwealth should work with the states to develop a sustainable funding model to support the marine spatial planning (MSP) process and subsequent management of marine protected areas (MPAs) and marine resources, taking into account the unique features of the marine environment, and the wide range of marine and coastal users and stakeholders.

4.7 Indigenous engagement and recognition of sea country

Marine management needs to recognise the interconnectedness of people, culture and place. This includes a consistent statutory framework for the inclusion of sea country in the policy framework for IPAs, mechanisms for resolving conflicts between zoning designations and uses of sea country IPA areas, and a wider range of mechanisms for recognising sea country in such arrangements.

RECOMMENDATION 4.7

For both the marine spatial planning (MSP) process and the completion of the National Reserve System for Marine Protected Areas (NRSMPA), better engagement with indigenous groups and recognition of sea country is essential, including recognition of the potential for multiple legal and non-legal modalities for sea country governance.

APEEL



The Australian Panel of Experts
on Environmental Law

CLIMATE LAW

TECHNICAL PAPER 5

APEEL



The Australian Panel of Experts
on Environmental Law

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About APEEL

The Australian Panel of Experts on Environmental Law (APEEL) is comprised of experts with extensive knowledge of, and experience in, environmental law. Its membership includes environmental law practitioners, academics with international standing and a retired judge of the Federal Court. APEEL has developed a blueprint for the next generation of Australian environmental laws with the aim of ensuring a healthy, functioning and resilient environment for generations to come. APEEL's proposals are for environmental laws that are as transparent, efficient, effective and participatory as possible. A series of technical discussion papers focus on the following themes:

1. The foundations of environmental law
2. Environmental governance
3. Terrestrial biodiversity conservation and natural resources management
4. Marine and coastal issues
5. Climate law
6. Energy regulation
7. The private sector, business law and environmental performance
8. Democracy and the environment

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Summary and Recommendations

Executive Summary

On the current trajectory, our world is moving inexorably towards ‘dangerous climate change’ and a world of extreme climate events in which sustainable development goals, and perhaps human survival itself, are threatened. According to the science, deep cuts in greenhouse gas emissions have to be made in the relatively near future, if this dire situation is to be turned around. This APEEL *Technical Paper* maps existing legal and regulatory arrangements that address the climate change challenge, focussing on the issue of *mitigation* – the reduction of greenhouse gas emissions. Climate change law also encompasses questions of *adaptation* – the management of climate impacts and of human and ecosystem vulnerabilities to climate change, an issue more closely linked to land use policies, planning and biodiversity laws. This *Technical Paper* considers the limitations of existing climate laws in Australia - taking account of recent international developments such as the 2015 *Paris Agreement* - and canvasses options for reform.

Specific recommendations include:

- 5.1. *Australia should encourage broad ratification of the Kyoto Protocol Doha Amendment and re-evaluate its currently weak pre-2020 (second commitment period) target in line with the guidance provided by the Paris Outcome. Another practical step would be to forgo available credits banked from the first commitment period as a way of increasing the domestic emissions reduction effort necessary to meet the second commitment period target.*
- 5.2. *Australia should re-evaluate its currently weak post-2020 target in line with the guidance provided by the Paris Agreement and the recommendations of the Climate Change Authority. The Authority’s most recent report suggests a 2025 target of a 30% cut from 2000 levels would represent a fair and ambitious contribution to the global response on climate change mitigation.*
- 5.3. *A national carbon price offers a preferable regulatory option for achieving absolute, economy-wide emissions reductions than the current Emissions Reduction Fund (ERF) policy. In designing domestic emissions reduction policies, Australia should consider the full carbon footprint of local activities including their offshore (scope 3) emissions.*

HOW TO CONTRIBUTE TO THE APEEL PROJECT

APEEL invites you to provide your responses to the ideas and recommendations presented in this paper. This will assist the development of our final proposals for the next generation of Australian environmental laws.

We look forward to your engagement on specific reform options as the APEEL journey progresses.

Please send your responses to: admin@apeel.org.au or go to www.apeel.org.au where you can do so online.

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1. Climate change as a key challenge for ESD

Climate change brought about by human-sourced emissions of greenhouse gases¹ poses a fundamental challenge for achieving ecologically sustainable development (ESD).² 'Business as usual' rates of emissions put the globe on track for levels of warming of 4°C or more.³ Normal ecosystem functioning and, indeed, life as we know it are not sustainable under such scenarios. Iconic environments, such as the Great Barrier Reef, would be irrevocably lost.⁴ The international community in the United Nations *Sustainable Development Goals* for the period 2015-2030 thus called for countries to 'take urgent action to combat climate change and its impacts'.⁵

This *Technical Paper* examines the role of climate law in achieving ESD and a safe climate future for Australia.⁶ It first sets out the current laws governing greenhouse gas emissions reduction (or *climate change mitigation*), considering both the implications of requirements at the international level and domestic legal responses in Australia. It then identifies challenges that limit the effectiveness of those legal measures, and opportunities and options for law reform that could strengthen Australia's climate laws and pave the way for a more sustainable climate future.

1 The principal greenhouse gas is carbon dioxide, with other greenhouse gases including methane, nitrous oxide and synthetic fluorinated gases. Given the dominant role of carbon dioxide in greenhouse pollution, greenhouse gases are often referred to as 'carbon' emissions.

2 The concept and principles of ESD and their place in Australian environmental law are discussed further in Australian Panel of Experts on Environmental Law, *Energy Regulation* (Technical Paper 6, 2017).

3 R K Pachauri and L A Meyer (eds), 'Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change' (Synthesis Report, Intergovernmental Panel on Climate Change, Geneva, 2014).

4 O Hoegh-Guldberg et al, 'Coral Reefs under Rapid Climate Change and Ocean Acidification' (2007) 318 *Science* 1737; C Pelejero, E Calvo and O Hoegh-Guldberg, 'Paleo-perspectives on ocean acidification' (2010) 25(6) *Trends in Ecology and Evolution* 332; K Frieler et al, 'Limiting global warming to 2 degrees C is unlikely to save most coral reefs' (2013) 3 *Nature Climate Change* 165; C Veron et al, 'The coral reef crisis: The critical importance of <350 ppm CO₂' (2009) 58 *Marine Pollution Bulletin* 1428.

5 *Transforming our world: the 2030 Agenda for Sustainable Development*, GA Res 70/1, UN GAOR, 70th sess, Goal 13 (25 September 2015).

6 The climate change challenge is a multi-faceted one that involves many issues beyond that of emissions reduction, for instance, questions of energy regulation, private sector energy transition, adaptation, loss and damage and the human rights implications of climate harms. Aspects of these topics are dealt with in other *Technical Papers*, but for reasons of lack of space, they are not discussed here.

2. The regulatory landscape of climate law

Climate change mitigation poses a complex, multi-level challenge for regulation and governance.⁷ The greenhouse gas emissions that cause climate change have their source in human activities undertaken around the globe by individuals, communities, governments and businesses. In an attempt to regulate greenhouse emitting activities and to reduce emissions to sustainable levels, a diverse array of regulatory and non-regulatory measures has been developed at many levels of government from the global to the local level, and involving a multitude of different actors.

Part of the challenge facing climate law has been to work out what aspects of mitigation are best addressed at which level. The *Paris Agreement*, concluded by parties to the *United Nations Framework Convention on Climate Change* (UNFCCC) in December 2015, makes clear that from 2020 most of the heavy lifting on mitigation will lie with national governments, with their actions supplemented considerably by those of state and local governments, businesses and civil society. The role of international law in this system is largely procedural; ensuring that state parties produce, review and progressively strengthen their emissions reduction commitments over time in a transparent and accountable fashion. Nonetheless, living up to the new requirements of the *Paris Agreement* will require Australia to ramp up its national emissions reduction targets significantly and to put in place implementation measures that can achieve these targets effectively.

The following sections outline the new international legal arrangements under the *Paris Agreement*, and their implications for climate law and policy in Australia.⁸ An overview is then provided of the main legal instruments currently in place at the national and state levels in Australia that deal with the issue of emissions reduction.

2.1 International law for climate change mitigation

The *Paris Agreement* is the latest treaty instrument to be concluded as part of the international climate change regime. The foundational treaty of the regime is the 1992 UNFCCC,⁹ which provides its institutional and normative architecture and specifies an ultimate objective of stabilising atmospheric greenhouse gas concentrations ‘at a level that would prevent dangerous anthropogenic interference with the climate system’.¹⁰ In line with the principle of common, but differentiated responsibilities and respective capabilities (CBDRRC),¹¹ the UNFCCC divides parties up into two groups: developed countries (known as Annex I parties) and developing countries (known as non-Annex I parties), placing emissions reduction obligations only on the former. This ‘firewall’ between developed and developing country mitigation commitments was maintained by the UNFCCC’s supplementary 1997 *Kyoto Protocol* that specifies emission reduction targets and timetables for developed country parties – like Australia – and establishes review and compliance mechanisms to ensure implementation.¹²

By contrast, the *Paris Agreement* that will take effect from 2020¹³ operates in a bottom-up fashion and requires *all* parties – developed and developing countries – to take actions to address climate change. In this respect, the *Paris Agreement* represents a significant departure from the top-down, target-setting approach of the *Kyoto Protocol* that preceded it. The bottom-up model of the *Paris Agreement* fundamentally relies on good faith, ambitious climate action by participating countries in order to achieve collective goals of emissions reduction to safe and sustainable levels.

7 J Peel, L Godden and R Keenan, ‘Climate Change Law in an Era of Multi-Level Governance’ (2012) 1(2) *Transnational Environmental Law* 245.

8 The UNFCCC, *Kyoto Protocol* and now the *Paris Agreement* are the principal international legal instruments governing climate change mitigation but are not the only relevant international legal rules. Various other international treaties impose obligations on states that may be triggered by a failure to take adequate mitigation action and resulting climate damage. Examples include parties’ obligations to safeguard World Heritage properties such as the Great Barrier Reef under the *World Heritage Convention*, the responsibility on all states under general international law not to cause harm through activities undertaken on their own territories to the territories of other states or to the global commons, and obligations under human rights treaties owed by state parties to their citizens to uphold their human rights including rights to life, privacy, health, and cultural rights. See further R Rayfuse and S V Scott (eds), *International Law in the Era of Climate Change* (Elgar, 1st ed, 2012).

9 *United Nations Framework Convention on Climate Change*, opened for signature 9 May 1992, 1771 UNTS 107 (entered into force 21 March 1994) (UNFCCC).

10 UNFCCC art 2.

11 UNFCCC art 3.1.

12 *Kyoto Protocol to the United Nations Framework Convention on Climate Change*, opened for signature 11 December 1997, 2303 UNTS A-30822 (entered into force 16 February 2005) (*Kyoto Protocol*).

13 To become binding as a matter of international law, the *Paris Agreement* required at least 55 ratifications or acceptances by UNFCCC parties representing 55% of total global greenhouse gas emissions: *Paris Agreement* art 21. The *Paris Agreement* entered into force on 4 November 2016. Australia is party to the *Agreement*.

2.1.1 Emissions reduction commitments under the *Paris Agreement*

Under the *Paris Agreement* countries do not commit to achieving any particular level of emissions reduction. Rather each party undertakes to ‘prepare, communicate and maintain successive nationally determined contributions that it intends to achieve’¹⁴ for the post-2020 period and to ‘pursue domestic mitigation measures, with the aim of achieving the objectives of such contributions’.¹⁵ Countries are required to update their nationally determined contributions (NDCs) every 5 years and their performance against these commitments will be evaluated in accordance with internationally administered accounting, reporting and transparency requirements. Developed country parties, such as Australia, are also urged to undertake ‘economy-wide absolute emission reduction targets’ (that is, emissions should not grow in these countries) as part of their NDCs.¹⁶ However, NDCs – as the name suggests – are determined by parties in their own domestic policy-making processes rather than imposed as a matter of international law. While this gives national governments significant discretion to determine their own emissions reduction targets post-2020, the *Paris Agreement* specifies various principles and procedures that will apply to NDCs put forward by countries.

At a high level, NDCs must conform to the ‘no backsliding’ principle; that is, they must represent ‘ambitious efforts’ with ‘a progression over time’ taken ‘with the view to achieving the purpose’ of the *Paris Agreement*.¹⁷ The purpose of the Agreement, set out in article 2, seeks to enhance implementation of the *UNFCCC* and its greenhouse gas stabilisation objective, and ‘to strengthen the global response to the threat of climate change, in the context of sustainable development and efforts to eradicate poverty’.¹⁸ In particular, the *Agreement* aims to hold the global average temperature increase to ‘well below 2° C above pre-industrial levels’ and parties also agree ‘to pursue efforts to limit the temperature increase to 1.5° C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change’.¹⁹ This ‘long-term temperature goal’ will provide an important substantive standard for assessing the adequacy of countries’ NDCs over time. Based on current climate science, many believe this temperature goal will be insufficient to protect the climate system and the environment adequately, and continue to advocate for policy to aim for a lower maximum temperature rise.²⁰ Even so, pursuing a maximum 1.5° C increase as opposed to 2° C – which had previously been accepted as the default interpretation of the *UNFCCC*’s objective of avoiding ‘dangerous’ climate change²¹ – will require significantly deeper emissions cuts than are presently on the table in terms of the intended NDCs submitted by countries in the lead-up to the Paris conference.²²

Although the *Paris Agreement* does not provide a concrete roadmap for bridging the ‘ambition gap’ between existing NDCs articulated by countries for the period to 2025 or 2030 and the 1.5° C (or even the 2° C) goal, there are some ‘guardrails’ that offer hope for keeping parties on track. These include:

- a collective aim of parties to reach global peaking of emissions ‘as soon as possible’, (although it is recognised that peaking will take longer for developing country parties) and to undertake rapid reductions thereafter ‘in accordance with best available science’;
- a collective aim of parties to achieve a ‘balance between anthropogenic emissions by sources and removals by

14 Conference of the Parties, *United Nations Framework Convention on Climate Change, Adoption of the Paris Agreement*, 21st sess, UN Doc FCCC/CP/2015/L.9 (12 December 2015) Annex (*Paris Agreement*) art 4.2.

15 *Paris Agreement* art 4.2.

16 *Paris Agreement* art 4.4. This provision includes the designation ‘should’ rather than ‘shall’ as a mandatory provision would have jeopardised U.S. participation due to its need to seek U.S. Senate approval (unlikely to be forthcoming) for new binding U.S. treaty commitments not able to be implemented in accordance with existing executive authority.

17 *Paris Agreement* art 3.

18 *Paris Agreement* art 2.1.

19 *Paris Agreement* art 2.1(a).

20 A growing body of scientific evidence shows that 2° C would threaten the viability of many ecosystems, including coral reefs like Australia’s Great Barrier Reef (see also O Hoegh-Guldberg et al, above n 4). Consequently, environmental groups have campaigned for the 1.5° C (or a lower) temperature goal. See for example, the ACF’s climate change policy which states: ‘ACF supports all actions and targets initially intended to limit the increase of the average global surface temperature as close to 1.5 degrees Celsius above pre-industrial levels as possible, and to then over the longer term stabilize global average temperatures at 1 degree Celsius above preindustrial levels and atmospheric concentrations of greenhouse gases at 350ppm CO₂e or less’.

21 H Rogner et al, ‘Introduction’ in *Climate Change 2007: Mitigation Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press, 2007) 99. Small island states have long pushed for a lower temperature goal fearing that a 2° C rise would render their territories uninhabitable.

22 *Synthesis report on the aggregate effect of the intended nationally determined contributions*, FCCC/CP/2015/7, UNFCCC Secretariat, 21st sess, Item 4(a) Provisional Agenda (30 November 2015).

sinks²³ of greenhouse gases in the second-half of the century', which has been interpreted as a requirement to reach zero net carbon by 2050 or as soon as possible thereafter;²⁴

- establishment of a 'global stocktake' procedure, to commence in 2023 and continue every five years thereafter, which will assess collective progress towards achieving the purpose of the *Paris Agreement* and its long-term goals 'in the light of equity and the best available science', and 'inform Parties in updating and enhancing' their climate actions, including NDCs.²⁵

These provisions send a strong signal to governments and business about the imperative for rapid transition to a decarbonised economy in order to ensure the health of the planet and a safe climate for present and future generations.

2.1.2 Implications of the *Paris Outcome* for Australia

The *Paris Agreement* is designed to set the parameters for countries' national climate actions for the period 2020 onwards. For Australia, as a party to the *Agreement*, the most significant implication is the need to devise, implement and review NDCs on a five yearly basis. Australia's NDCs will be set at the domestic level, but will need to meet the requirements of the *Paris Agreement*. In particular, each NDC put forward by Australia will be evaluated internationally in light of the best available climate science, and whether it makes an equitable, progressive and ambitious contribution to global efforts to achieve the *Agreement's* long-term temperature goal.

For the initial period up to 2025 or 2030, it is likely that parties' first NDCs will be the same as those submitted in the lead-up to the Paris conference. In Australia's case that is an economy-wide emissions reduction target of 26-28% below 2005 levels by 2030. This NDC has been ranked as one of the least ambitious targets submitted by a developed country.²⁶ It is likely that the Australian government will come under pressure to strengthen this target prior to 2020. For example, the *UNFCCC* Conference of the Parties decision (*COP Decision*) adopting the *Paris Agreement* provides for 'a facilitative dialogue' in 2018 'to take stock of the collective efforts of Parties in relation to progress towards the long-term goal... and to inform the preparation of nationally determined contributions'.²⁷ The Intergovernmental Panel on Climate Change has also been requested to provide a special report in the same year 'on the impacts of global warming of 1.5° C above pre-industrial levels and related global greenhouse gas emissions pathways'.²⁸ This report should provide guidance on the latest scientific thinking about what emissions cuts are necessary to reach 1.5° C (or below); evidence that, together with considerations of equity, is to inform the preparation of NDCs.

While the *Paris Agreement* does not specifically deal with parties' obligations pre-2020, the *COP Decision* that adopted the *Agreement* contains important guidance in this regard. The issue of pre-2020 action is an important one as there is currently:

'a significant gap between the aggregate effect of Parties' mitigation pledges in terms of global annual emissions of greenhouse gases by 2020 and aggregate emission pathways consistent with holding the increase in the global average temperature to well below 2° C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5° C above pre-industrial levels'.²⁹

23 The primary carbon sinks are the ocean and forested areas. Pursuant to article 5, the *Paris Agreement* also urges parties to take action to conserve and enhance carbon sinks, including forests. It endorses implementation measures such as REDD+ (activities for reducing emissions from deforestation and forest degradation and enhancing forest carbon stocks in developing countries) and alternative policy approaches, such as joint mitigation and adaptation approaches for the integral and sustainable management of forests.

24 M B Gerrard, 'What the Paris Agreement Means Legally for Fossil Fuels', *Columbia Centre on Global Energy Policy*, 18 December 2015.

25 *Paris Agreement* art 14.

26 'Fact check: Do Australia, US 'Compare Favourably' on Emissions Targets?', *ABC News*, 18 December 2014 <<http://www.abc.net.au/news/2014-12-18/greg-hunt-cherrypicking-emissions-reduction-targets/5896148>>; D Thorpe, 'Australia's Climate Pledge Leaves Other Countries to Pick up the Slack', *The Drum*, 18 August 2015 <<http://www.thefifthestate.com.au/habitat/climate-change-news/australias-climate-pledge-leaves-other-countries-to-pick-up-the-slack/76661>>; Climate Change Authority, *Comparing Countries' Emissions Targets: A Practical Guide* (March 2015).

27 Conference of the Parties, *United Nations Framework Convention on Climate Change, Adoption of the Paris Agreement*, 21st sess, UN Doc FCCC/CP/2015/L.9/Rev.1, (12 December 2015) (*COP Decision*) para 20.

28 *COP Decision* para 21.

29 *COP Decision* Preamble.

In other words, pre-2020, emissions are presently on an unsustainable pathway that will make achieving post-2020 goals significantly harder.

As an initial measure, for the pre-2020 period, the *COP Decision* adopting the *Paris Agreement* urges *Kyoto Protocol* parties who have not already done so to ratify and implement the *Doha Amendment*.³⁰ The *Doha Amendment* is the legal basis for the Protocol's 'second commitment period' running from 2013-2020.³¹ In the Protocol's 'first commitment period', from 2008-2012, developed country parties accepted individual emissions reduction targets (for example, Australia's target was 108% of 1990 emissions levels; a target which was readily achieved). Australia's emissions reduction commitment under the *Doha Amendment* is a 5% cut on 2000 levels by 2020.³² At the Paris climate conference in December 2015, Prime Minister Malcolm Turnbull declared Australia would ratify the *Doha Amendment* for the *Kyoto Protocol* second commitment period.³³ The Australian government formalised this decision with its ratification of the *Doha Amendment* on 10 November 2016. The *Amendment* has not yet achieved sufficient ratifications from other countries to enter into force.

The *COP Decision* adopting the *Paris Agreement* further encourages parties to promote the voluntary cancellation of international carbon trading units issued under the *Kyoto Protocol* so they cannot be offset against emissions reduction commitments for the second commitment period. In Australia's case, since it easily achieved its first commitment period target and has excess carbon units available from that period, cancelling units would mean deeper domestic emissions cuts would be necessary in order to meet the second commitment period target.³⁴ The *COP Decision* also provides for the appointment of two 'high-level champions' - similar to special rapporteurs in the human rights context - whose job it will be to facilitate 'the successful execution of existing efforts and the scaling-up and introduction of new or strengthened voluntary efforts, initiatives and coalitions'.³⁵ The hope is that this combination of measures will push countries to implement and strengthen existing pledges for the pre-2020 period.

2.2 Australian law for climate change mitigation

As Australian Panel of Experts on Environmental Law, *Environmental Governance* (Technical Paper 2, 2017) notes, in the absence of a constitutional head of power with respect to the environment, Australia's environmental governance system is one where regulatory powers are shared between the federal government and the states. The federal government has the capacity to pass and enforce climate laws largely through its constitutional powers to implement treaties to which Australia is a party. State governments may have their own regulatory measures that relate to aspects of the climate change mitigation challenge, including emissions reduction targets, renewable energy laws and energy efficiency requirements for buildings and appliances.³⁶ The potential overlap between federal and state laws (and between different types of climate mitigation measures) raises questions about how these laws should relate to each other or their *complementarity*. The following sections first discuss the existing, rather sparse landscape of federal climate law, before turning to state climate measures and issues of complementarity.

³⁰ *COP Decision* para 106(a).

³¹ Conference of the Parties Serving as the Meeting of the Parties to the *Kyoto Protocol*, *United Nations Framework Convention on Climate Change*, *Report of the Conference of the Parties Serving as the Meeting of the Parties to the Kyoto Protocol on its Eighth Session, Held in Doha from 26 November to 8 December 2012: Addendum Part Two: Action Taken by the Conference of the Parties Serving as the Meeting of the Parties to the Kyoto Protocol at its Eighth Session*, 8th sess, UN Doc FCCC/CP/2012/13/Add.1 (28 February 2013) Decision 1/CMP.8 (*Doha Amendment*).

³² Australia has also pledged the same target under a parallel UNFCCC COP process whereby countries, including non-parties to the *Kyoto Protocol* such as the US, China and India, put forward self-nominated national actions on emissions for the pre-2020 period.

³³ E Jackson, 'Day 1, Paris climate talks: helping dirty power get clean', *Crikey* (online), 1 December 2015 <<http://www.crikey.com.au/2015/12/01/day-1-paris-climate-talks-helping-dirty-power-get-clean/>>; P Hannam, 'Paris UN Climate Conference 2015: Cloud over Turnbull's 5% promise', *Sydney Morning Herald* (online), 4 December 2015 <<http://www.smh.com.au/environment/un-climate-conference/paris-un-climate-conference-2015-cloud-forms-over-turnbulls-promise-to-the-world-20151203-glif4cl.html>>.

³⁴ *COP Decision* para 107.

³⁵ *COP Decision* para 122.

³⁶ Aspects of state and federal energy regulation relevant to the climate change mitigation challenge are discussed further in Australian Panel of Experts on Environmental Law, *Energy Regulation* (Technical Paper 6, 2017).

2.2.1 Federal climate law

In pursuance of Australia's international obligations under the *UNFCCC* climate treaty regime, over time federal governments have introduced a range of legislative and policy measures dealing with greenhouse gas emissions reduction and the related issue of promoting 'clean' (low or zero carbon) energy sources.

Present federal climate policy is directed to the achievement of emissions reductions in the pre- and post-2020 timeframes. As mentioned above, Australia's emissions reduction target for the period up to 2020 is a 5% reduction below 2000 levels. In August 2015, the federal government announced that Australia's intended NDC going into the Paris negotiations was a cut of 26-28% from 2005 levels over the period 2020- 2030. While this target looks *prima facie* comparable to that of other developed countries (for example, the U.S. NDC pledges a cut of 26-28% from 2005 levels by 2025), the adoption of a 2005 baseline (a historically high year for emissions in Australia), coupled with a 10 year timeframe for achievement, means that Australia's NDC sits at the low end of pledges by developed countries.³⁷ The government's target also falls well short of the recommendations of the independent Climate Change Authority for adoption of more stringent targets to cut emissions 30% from 2000 levels by 2025 and 40-60% from 2000 levels by 2030.³⁸

On taking over the Prime Ministership from Tony Abbott, Malcolm Turnbull indicated that there would be no change to Australia's post-2020 target, though, with the *Paris Agreement* now in place and global stocktakes scheduled starting in 2023, it is likely that Australia will come under pressure to review and strengthen this target. There would be a strong argument, for instance, that Australia's current NDC is neither in line with equity (CBDRRC or any other reasonable interpretation of this standard) or the best available scientific evidence, including assessments of global emissions cuts necessary to stay 'well below' 2 °C and to pursue the more stringent goal of 1.5 °C.

Australia's most definitive regulatory response to climate change was the carbon pricing mechanism established under the *Clean Energy Act 2011* (Cth), enacted by the Gillard government and later repealed by the Abbott government. Like the *Kyoto Protocol*, which features various 'flexibility mechanisms' such as emissions trading,³⁹ the legislation endorsed a market-based approach as the most cost-effective way to achieve economy-wide emissions reductions. The carbon pricing mechanism commenced with a 'fixed price' phase (commonly, although incorrectly, dubbed the 'carbon tax')⁴⁰ and was set to transition to a fully-fledged emissions trading scheme (the 'floating price' phase) in 2015 (see Table 1 below). The carbon pricing mechanism represented the culmination of many decades of debate in Australia over the design of climate policy for emissions reduction.⁴¹ It was widely endorsed by commentators as a well-designed, albeit not perfect, regulatory measure for the purpose.⁴² There is also growing evidence that, prior to its repeal, the carbon pricing mechanism had a measureable impact in reducing national emissions, especially from the electricity sector.⁴³

37 F Jotzo, 'Australia's 2030 Climate Target Puts Us in the Race, But At the Back', *The Conversation* (online), 11 August 2015, <<https://theconversation.com/australias-2030-climate-target-puts-us-in-the-race-but-at-the-back-45931>>.

38 Climate Change Authority, *First Draft Report of the Special Review: Australia's Future Emissions Reduction Targets* (April 2015) <<http://www.climatechangeauthority.gov.au/special-review/first-draft-report>>.

39 See *Kyoto Protocol*, art 17. The *Kyoto Protocol* also allows for joint implementation and the Clean Development Mechanism, both of which permit parties to undertake emissions reductions in other countries rather than making domestic emissions cuts.

40 The carbon pricing mechanism was an ETS not a tax, albeit a hybrid version with the price of emissions allowances fixed in the first three years of the scheme.

41 See A Zahar, J Peel and L Godden, *Australian Climate Law in Global Context* (Cambridge University Press, 2013) 155-163; see also Australian Panel of Experts on Environmental Law, *Energy Regulation* (Technical Paper 6, 2017) for detail on the benefits of imposing a price on carbon and other regulatory reform and Australian Panel of Experts on Environmental Law, *The Private Sector, Business Law and Environmental Performance* (Technical Paper 7, 2017) for more on carbon and other pricing mechanisms.

42 F Jotzo, 'Australia's Carbon Price' (2012) 2 *Nature Climate Change* 475.

43 G Hutchens, 'New Data Shows Record fall in Carbon Emissions', *Sydney Morning Herald* (online), 23 December 2014 <<http://www.smh.com.au/environment/climate-change/new-data-shows-record-fall-in-carbon-emissions-20141223-12d1z3.html>>; AAP, 'Carbon Tax Repeal Sparks Jump in Australia's Electricity Emissions', *The Guardian* (online), July 5, 2015 <<http://www.theguardian.com/environment/2015/jul/05/carbon-tax-repeal-sparks-jump-in-australias-electricity-emissions>>.

TABLE 1: AUSTRALIA'S CARBON PRICING MECHANISM (2012-2014)

The carbon pricing mechanism (CPM) under the *Clean Energy Act 2011* (Cth) sought to 'put a price on carbon' so that major greenhouse gas emitters would be required to internalise the costs of carbon pollution. The CPM covered 60% of Australia's emissions and imposed obligations on approximately 500 emitters, known as liable entities. These entities were liable to surrender emission allowance units commensurate with their 'covered emissions', that is, those greenhouse gases released into the atmosphere in Australia as a direct result of the operation of the entity's facility. Each emission allowance unit represented 1 tonne of CO₂ equivalent. During the first three years of the CPM, the unit price was 'fixed' with a starting price of \$23 per tonne in the 2012-2013 financial year. During the fixed price period, liable entities were required to acquire units at the fixed charge rate and surrender sufficient units to cover their emissions for that year. They were unable to trade surplus units, but could sell back their unneeded units to the Clean Energy Regulator, for a discounted price. From July 2015, the CPM would have transitioned to a 'floating price' phase. In this phase, units were to be auctioned by the Clean Energy Regulator with the price of units ultimately set by the market. Units would have been tradeable, as in a classic emissions trading scheme, so that businesses that had surplus units could sell those to others who required extra units to cover their annual emissions.

With the repeal of the *Clean Energy Act 2011* (Cth), and other climate-relevant laws such as the *Energy Efficiency Opportunities Act 2006* (Cth), the landscape of federal climate law is now sparse. The 'centrepiece' of the Abbott and Turnbull government's climate policy is the misleadingly named 'Direct Action'. While often compared with the direct regulatory strategy being pursued by the former Obama Administration in the United States (see further section 3.4.1 below), the Direct Action policy imposes only very weak limits on greenhouse gas emissions from large emitting sources. Australian Panel of Experts on Environmental Law, *Energy Regulation* (Technical Paper 6, 2017) also discusses Direct Action vs carbon pricing as energy regulation policy options.

The legislative basis for Direct Action is a 2014 amendment to the *Carbon Credits (Carbon Farming Initiative) Act 2011* (Cth), which previously provided for the Carbon Farming Initiative (CFI) – a form of carbon offset for the agricultural and land sector that allowed the generation of credits that could be used as emissions offsets under the carbon pricing mechanism.⁴⁴ The amending legislation established the Emissions Reduction Fund (ERF) and rolled the CFI into this fund. Allocated \$2.55 billion in the 2014-2015 budget, the ERF provides financial incentives to businesses, organisations and individuals across a variety of sectors to reduce emissions. Participants tender emissions-reducing projects that are selected through an auction process run by the Clean Energy Regulator. Successful projects receive Australian carbon credit units (ACCUs), which can either be sold back to the government at the contracted price accepted in the auction process, or on the international voluntary carbon market. To date, three auctions have been held for the ERF with contracts issued to purchase more than 143 million tonnes of carbon dioxide equivalent (t CO₂-e) emissions reductions from vegetation, waste, agriculture, savanna burning, energy efficiency, transport and coal mine gas projects.⁴⁵

The ERF is essentially a voluntary scheme for emissions reduction,⁴⁶ though some broad constraints on emissions were

⁴⁴ The CFI Act established a process for the recognition of eligible offsets, with projects assessed in relation to certain rules and standards. Credits could be generated either by carbon sequestration or carbon avoidance activities including reforestation, grazing management, application of biochar to soil and various methane reduction livestock management activities. These measures have now been rolled into the ERF as projects which can tender for funding under that scheme.

⁴⁵ See further Clean Energy Regulator, *Third Auction Results Released* (6 May 2016) <[http://www.cleanenergyregulator.gov.au/ERF/Pages/News and updates/News-item.aspx?ListId=19b4efbb-6f5d-4637-94c4-121c1f96fcfe&ItemId=250](http://www.cleanenergyregulator.gov.au/ERF/Pages/News%20and%20updates/News-item.aspx?ListId=19b4efbb-6f5d-4637-94c4-121c1f96fcfe&ItemId=250)>.

⁴⁶ Voluntary schemes for emissions reduction in Australia have largely been judged ineffective in significantly lowering national greenhouse gas emissions. See for example, R Sullivan, 'Greenhouse Challenge Plus: A New Departure or More of the Same?' (2006) 23 *Environmental and Planning Law Journal* 65 finding that the Howard government's Greenhouse Challenge Program failed to provide 'strong incentives for Australian business to significantly reduce its greenhouse gas emissions'.

introduced on 1 July 2016 through the scheme's 'safeguard mechanism'.⁴⁷ This mechanism covers facilities with direct (scope 1) emissions⁴⁸ of more than 100,000 t CO₂-e a year (around 140 businesses or approximately half of Australia's emissions). Covered facilities must ensure their emissions do not exceed their individual 'baseline' - the highest level of reported emissions for a facility over the historical period 2009-10 to 2013-14. In the electricity industry a sector-wide baseline applies and is set at the high point of sectoral emissions over the period 2009-10 to 2013-14; although individual baselines apply in the event that the sectoral-baseline is exceeded. These already generous baselines can be further adjusted to accommodate economic growth, natural resource availability, and a range of other factors. It is likely that most covered facilities will easily meet their baselines, obviating the need for any emissions reductions from a 'business-as-usual' scenario. New investments instituted from 2020 onwards will be subject to a potentially tighter 'best practice' standard. Compliance measures for the safeguard mechanism suggest that facilities will be given significant flexibility to determine how they meet baselines, including through the purchase of ACCU offsets, or averaging emissions over a two or three-year period. The flaws in the scheme, in terms of climate mitigation regulation, are further explored at section 3.2 below.

Beyond Direct Action/the ERF, a range of other federal laws regulates aspects of Australia's greenhouse gas emissions generation.⁴⁹ The most important of these is the *Renewable Energy (Electricity) Act 2000* (Cth), which establishes the Renewable Energy Target (RET) with the goal of increasing the uptake of clean, renewable energy sources in the electricity sector. The scheme utilises a market in renewable energy certificates (RECs) generated from renewable energy activities and purchased by electricity generators to drive the uptake of renewable energy. After problems of REC oversupply, under the Rudd government, the scheme was split into small-scale (rooftop solar) and large-scale components. Following the election of Tony Abbott as Prime Minister, the future of the scheme and renewable energy investment in Australia were the subject of considerable uncertainty. After a government review of the RET, the 2020 target for the large-scale component of the scheme was reduced from 41,650GWh to 33,000GWh (a near 20% cut).⁵⁰ The Abbott government also instructed the Clean Energy Finance Corporation to halt investment in wind power projects,⁵¹ although this decision was subsequently reversed by the Turnbull government in signs of a changing federal attitude to renewables and climate policy more generally.

Emissions from the land-use sector and from transportation are subject to little federal control in strong contrast to other developed nations. Indeed, fossil fuel subsidies provided by the federal government contribute to unsustainable energy use and emissions in transportation. Some constraints on new greenhouse gas-intensive development are potentially provided by the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (*EPBC Act*), being the federal environmental impact assessment (EIA) legislation. While the *EPBC Act* does not include a trigger for environmental assessment specifically tied to greenhouse gas emissions or climate change, EIA conducted for projects that impact matters of national environmental significance, for example world heritage properties or Commonwealth listed threatened species, may involve a consideration of climate change issues. This issue has been the subject of several challenges before the Federal Court of Australia questioning the approval of new coal mines, but advocates have so far been unsuccessful in stopping coal projects on the basis of their contribution to greenhouse gas emissions and climate change.⁵²

47 For details see Department of Environment and Energy (Cth), *The Safeguard Mechanism* (2016) <<https://www.environment.gov.au/climate-change/emissions-reduction-fund/publications/factsheet-erf-safeguard-mechanism>>.

48 Scope 1 emissions are those directly produced by a facility for example, carbon dioxide emissions from a coal-fired power plant. Scope 2 emissions are indirect emissions from the consumption of purchased electricity, heat or steam. Scope 3 emissions are all other indirect emissions, for instance, from burning of coal harvested in a domestic coal mine.

49 These include the *National Greenhouse and Energy Reporting Act 2000* (Cth) (which establishes reporting requirements for greenhouse gas emissions and energy consumption by large corporate emitters with the data used to compile national greenhouse inventories and reports on national emissions data submitted under the UNFCCC) and voluntary programs such as the National Carbon Offset Standard Carbon Neutral Program (which certifies products, businesses or events as carbon neutral against the Australian government's National Carbon Offset Standard).

50 ABC News, 'Renewable Energy Target: Legislation to Cut RET Passes Federal Parliament', *ABC News* (online), 23 June 2015 <<http://www.abc.net.au/news/2015-06-23/amendments-to-cut-renewable-energy-target-pass-parliament/6568642>>.

51 Jane Norman, 'Clean Energy Finance Corporation directed by government to stop funding wind farms', *ABC News* (online), 11 July 2015 <<http://www.abc.net.au/news/2015-07-12/government-lobbies-for-cefc-to-stop-wind-farm-funding/6613590>>.

52 See for example, *Wildlife Preservation Society of Queensland Proserpine/Whitsunday Branch Inc. v Minister for the Environment and Heritage* (2006) 232 ALR 510; *Mackay Conservation Group Inc v Commonwealth* [2015] FCA (4 August 2015) (Katzmann J) (approval for Adani coal mine set aside on the basis of a failure by the Minister to consider impacts on threatened species. The Minister later remade the decision, approving the mine, after consideration of these impacts).

2.2.2 State climate mitigation measures and complementarity issues

In addition to federal climate legislation there is an array of policy and legislative arrangements in each state and territory. Alongside a number of self-standing climate change laws, such as the *Climate Change Act 2010* (Vic),⁵³ state laws encompass legislation on renewable energy and energy efficiency, and forestry carbon rights. In the mid-2000s, states and territories evinced interest in developing an inter-jurisdictional emissions trading scheme to regulate greenhouse gas emissions from the stationary energy sector.⁵⁴ If this scheme had gone ahead it might have operated somewhat like the state-based regional greenhouse gas trading schemes in the United States, such as the Regional Greenhouse Gas Initiative (RGGI) and the Western Climate Initiative (WCI). However, plans for a state-led national emissions trading scheme were shelved when the Rudd Labor government won power in 2007. It is possible that, with several states and territories (for example, Victoria, South Australia and the ACT) now pursuing climate policies that are more progressive than those at the federal level, proposals for a sub-national emissions trading scheme may be revived.

The potential for innovative climate mitigation measures at the state level is illustrated by past initiatives, many of which were repealed or removed in the belief that they would become unnecessary in the face of a nation-wide carbon price.⁵⁵ This included cutting-edge schemes such as the NSW Greenhouse Gas Abatement (GGAS) scheme - the first trading scheme worldwide to address emissions from the electricity sector.⁵⁶ If ambitious climate mitigation action does not emerge at the federal level, it is likely that some states and territories will move to fill the gap with measures such as stringent state-level emissions reduction targets and renewable energy goals.

The centralisation of climate policy that occurred with the carbon pricing mechanism was supported by many commentators at the time as preferable to a regulatory mosaic with the potential for overlapping or conflicting requirements and a fragmentation of mitigation efforts.⁵⁷ Others expressed more caution as to the merits of a centralised approach which, in light of subsequent events, seems prescient. Tim Bonyhady, for example, argued that in a context 'where there is little basis for having faith in any level of government', the best approach may be one that uses federal regulation to set a floor for climate change protection, which states or local governments are free to exceed in their own laws.⁵⁸ This approach bears some similarities to the subsidiarity principle adopted in the European Union and also to the United States *Clean Power Plan* efforts (described further at 3.4.1 below). The latter establishes national standards for emissions reductions from existing coal-fired power plants, but then allows state governments to devise their own mix of measures to meet those standards. Such an approach has the advantage that it introduces a degree of uniformity by way of national minimum standards or targets, yet prevents those measures from becoming the lowest common denominator for all regulation in the area. In a partisan political environment, a decentralised/diversified approach may also provide some safeguard against radical shifts in climate policy with successive administrations.⁵⁹

53 This legislation is currently under review by the Victorian government. In December 2015, the Independent Committee appointed to undertake the review issued a far-reaching report including recommendations for a long-term emissions reduction target and a Charter of Climate Change Objectives and Principles see Wilder, Skarbek and Lyster 'Independent Review of the Climate Change Act 2010' (2015) Department of Environment, Land, Water and Planning <<http://www.delwp.vic.gov.au/environment-and-wildlife/climate-change#review>>. These recommendations are now before the Victorian parliament.

54 'Possible Design for a National Greenhouse Gas Emissions Trading Scheme' (Discussion Paper, National Emissions Trading Taskforce, August 2006).

55 At the time of development of national emissions trading proposals, the Council of Australian Governments (COAG) developed a set of 'Complementarity Principles' for federal and state governments to review the need for other emissions reduction measures alongside the national scheme: COAG, *COAG Principles for Jurisdictions to Review and Streamline their Existing Climate Change Mitigation Measures* (November 2008) <https://www.coag.gov.au/sites/default/files/20081129_complementarity_principles.pdf>. The result of this process was the phasing out of the NSW Greenhouse Gas Abatement (GGAS) scheme and other similar State schemes in favour of the national-level emissions trading scheme eventually implemented through the carbon pricing mechanism. Similar questions were raised in respect of the relationship between the mandatory national emissions trading scheme and voluntary measures and carbon markets. For discussion see The Climate Group, *The Role of Voluntary Action in Light of the CPRS and Australia's Ratification of the Kyoto Protocol* (May 2009) Climate Group <http://www.theclimategroup.org/_assets/files/The-role-of-voluntary-action-in-light-of-CPRS--May-2009.pdf>.

56 For an overview of the GGAS scheme see T Kearney, 'Market-based Policies for Demand Side Energy Efficiency: A Comparison of the New South Wales Greenhouse Gas Abatement Scheme and the United Kingdom's Energy Efficiency Commitment' (2006) 23 *Environmental and Planning Law Journal* 118.

57 See N Durrant, *Legal Responses to Climate Change* (Federation Press, 2010) 3; R Garnaut, *Garnaut Climate Change Review* (Cambridge University Press, 2008) 317-318.

58 T Bonyhady, 'The New Australian Climate Law' in Bonyhady and Christoff (eds) *Climate Law in Australia* (Federation Press, 2007) 26.

59 H M Osofsky and J Peel, *Energy Partisanship* (2016) 65 *Emory Law Journal* 695 (forthcoming), SSRN: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2523911. Experimentation by states with green industrial policies may also be an effective means, over time, of building coalitions in support of stronger climate measures: J Meckling et al, 'Winning Coalitions for Climate Policy: Green Industrial Policy Builds Support for Carbon Regulation' (2015) 349 *Science* 1170.

3. Current challenges and opportunities

The *Paris Agreement* has been lauded as a ‘historic breakthrough’ in international climate law and policy that puts the world on a path to achieving sustainable emissions levels and avoiding the worst effects of climate change.⁶⁰ While this view is not universally shared, after the many failures of international climate law over the past two decades, the *Paris Agreement* has achieved some significant ‘success’. In particular, the *Agreement* adopts an ambitious long-term temperature goal and puts in place reasonably rigorous processes for encouraging, reviewing and progressing national actions to reduce emissions by all countries.

Ultimately, the effectiveness of the *Paris Agreement* and of international cooperative efforts to avert dangerous climate change will depend on national governments taking strong domestic emissions reduction efforts, in conjunction with sub-national governments, businesses and civil society. In accordance with the bottom-up structure of the *Paris Agreement*, the focus is on countries adopting, in good faith, ambitious, equitable national actions to achieve the *Agreement’s* objectives rather than international enforcement of particular emissions cuts on states. If Australia is to be a constructive participant in the post-2020 international climate regime, and contribute its ‘fair share’ to global mitigation efforts, it will need to put in place more stringent emissions reduction targets and domestic mitigation measures than it has presently. Recommendations on how Australia can transition towards a low-carbon economy is detailed in Australian Panel of Experts on Environmental Law, *Energy Regulation* (Technical Paper 6, 2017).

That said, keeping temperatures ‘well below’ 2° C will clearly not be achieved through government efforts alone. Climate law of the future is likely to feature a multi-level, polycentric regulatory arrangement consisting of action at many different levels and in many different forums, including through domestic and transnational emissions trading programs, actions by cities to reduce emissions, litigation domestically and transnationally to attribute responsibility for climate harms and resultant human rights violations, and efforts to engage the private sector in clean energy development and adoption. The major concerns with this approach to climate law relate to the piecemeal nature of regulation, lack of coordination and the potential for conflicting measures, and determining whether the sum of the parts will add up to the whole in terms of meeting global emissions reduction targets.⁶¹ In addition to instituting their own emissions reduction measures, it will be important for governments to have in place appropriate regulatory settings that encourage energy transition and innovation in the private sector, discourage emissions-intensive practices, and support other climate mitigation activities of non-state actors.

The following sections focus on two aspects of Australian climate law and policy most in need of improvement in order to meet new international requirements and to ensure a safe and sustainable climate future for the country: national emissions reduction targets and measures for ensuring economy-wide emissions reductions.

3.1 Australia’s weak emissions reduction targets

At the domestic level in Australia, climate law is in a state of flux. On the mitigation front, Australia’s short-lived carbon pricing mechanism placed it - for a time - among the leading climate jurisdictions worldwide. With the repeal of the carbon price and efforts to wind back renewable energy and climate measures at the federal level and in some states, Australia is regarded internationally as a laggard on climate change. The installation as Prime Minister of Malcolm Turnbull - a known climate moderate - may signal the potential for a new policy direction on climate, but a key challenge for Turnbull remains convincing other members of his own Coalition government of the need for change.

One key area where the Turnbull government needs to ‘step up’ on climate change concerns the nation’s weak pre- and post-2020 emissions reduction targets. Although the announced targets seem fixed at present, the conclusion of the *Paris Agreement* provides opportunities to increase their ambition. In the pre-2020 period, there will be concerted efforts at the international level under the *UNFCCC* to encourage ‘enhanced action’ by parties. The Australian

⁶⁰ Coral Davenport, ‘Nations Approve Landmark Climate Accord in Paris’, *New York Times* (online), 12 December 2015 <http://www.nytimes.com/2015/12/13/world/europe/climate-change-accord-paris.html?_r=0>.

⁶¹ Peel, Godden and Keenan, above n 7.

government has followed through on the Prime Minister's announcement to ratify the *Doha Amendment*, but should now encourage other *Kyoto Protocol* parties to ratify so the amendment can come into force. This would make the 2020 target internationally binding on Australia. As current estimates suggest, the 2020 target will be readily met. The government also has the opportunity to enhance domestic emissions reductions in the pre-2020 period by:

- voluntarily cancelling international carbon credits from the first commitment period (for example, certified emissions reductions under the Clean Development Mechanism, excess assigned amount units from coming in under target in the first commitment period) so they are not applied towards the Australian target in the second commitment period. This would in effect require deeper domestic emissions cuts to meet the target of 5% below 2000 levels by 2020 since carbon credits banked from the first commitment period would not be applied as an offset;
- working with non-party stakeholders to catalyse their efforts to strengthen mitigation actions. This might involve encouraging and/or incentivising private sector efforts of the type outlined in Australian Panel of Experts on Environmental Law, *The Private Sector, Business Law and Environmental Performance* (Technical Paper 7, 2017) (for example, through enhanced disclosure requirements) or sub-national initiatives (for example, of states, territories and councils).

RECOMMENDATION 5.1

Australia should encourage broad ratification of the Kyoto Protocol Doha Amendment and re-evaluate its currently weak pre-2020 (second commitment period) target in line with the guidance provided by the Paris Outcome. Another practical step would be to forgo available credits banked from the first commitment period as a way of increasing the domestic emissions reduction effort necessary to meet the second commitment period target.

In relation to Australia's post-2020 target (that is, its first NDC), the *Paris Agreement* process will also provide several opportunities for Australia to reconsider its adequacy and to enhance its ambition in line with the new long-term temperature goal of the *Agreement* (see section 2.1.2 above). The *COP Decision* adopting the *Paris Agreement* also specifically requests that parties with 2030 targets (such as Australia) update these contributions by 2020.

In looking to revise the post-2020 target, the Australian government would be well advised to look to the recommendations of the Climate Change Authority, which issued a report in June 2015 assessing Australia's 'fair' contribution to global emissions reduction efforts. The Authority recommended a 2025 target of a 30% reduction below 2000 levels and further reductions by 2030 of 40-60% below 2000 levels. It found that while these targets would be 'challenging' they are consistent with climate science and comparable with the efforts of other countries; moreover, the Authority highlighted the major benefits that would accrue to Australia from avoiding the harmful consequences of climate change and participating in the economic opportunities posed by transition to a low-carbon economy.

RECOMMENDATION 5.2

Australia should re-evaluate its currently weak post-2020 target in line with the guidance provided by the Paris Agreement and the recommendations of the Climate Change Authority. The Authority's most recent report suggests a 2025 target of a 30% cut from 2000 levels would represent a fair and ambitious contribution to the global response on climate change mitigation.

3.2 Ineffective policy measures to reduce emissions

Apart from inadequate emissions reduction targets, a key deficiency of Australian climate law at present is the lack of credible national climate measures to deal with emissions reduction beyond 2020 and to transition Australia away from fossil fuel dependence to a clean energy economy. Even in respect of the present 2030 goal of a 26-28% cut on 2005 levels, it is unclear that current policy measures - especially the ERF - will be adequate to deliver on this low target. With projected emissions growth to 30% above 2005 levels by 2030, cutting emissions by 26-28% will be 'a substantial task'.⁶² Many commentators have expressed concern that the ERF lacks medium term sustainability and will not 'scale up' effectively to deliver on post-2020 emissions reduction commitments.⁶³ In this regard, a national carbon price offers a preferable regulatory measure that will be both scalable and more cost-effective than the ERF. In addition, Australian businesses that were previously subject to the carbon price still have systems in place to measure and account for emissions and are thus well-placed to respond to such a measure.

Moreover, even when the carbon pricing mechanism was in effect it did not extend to Australia's full carbon footprint, which is substantial in global terms given the nation's fossil fuel exports. The issue of offshore (scope 3) emissions from Australian coal and their contribution to climate change has been raised in a number of climate change cases. The question of whether such emissions should be factored into assessment of new Australian coal mine proposals has received a mixed reception in the courts.⁶⁴ Nonetheless, reconciling domestic climate policy and environmental assessment laws with export-oriented energy production remains a major issue for Australia; it goes to the heart of whether Australia will contribute its fair share to global emissions reduction efforts necessary to avert dangerous global warming.

RECOMMENDATION 5.3

A national carbon price offers a preferable regulatory option for achieving absolute, economy-wide emissions reductions than the current Emissions Reduction Fund (ERF) policy. In designing domestic emissions reduction policies, Australia should consider the full carbon footprint of local activities including their offshore (scope 3) emissions.

3.2.1 Options for reform

The most effective measures that could currently be taken to address concerns with the adequacy of Australian climate law would be to specify strong emissions reduction targets for the post-2020 period and to implement regulatory measures to allow cost-effective achievement of those targets.⁶⁵ This section of the *Technical Paper* canvasses options for reform of Australian climate law, focusing on national level measures for emissions reduction. It first considers how existing measures (the ERF and safeguard mechanism) might be strengthened before examining more far-reaching reforms. In this regard, the paper draws on experience from other jurisdictions that have utilised or are currently implementing national mitigation measures either via direct regulation or emissions trading schemes.

Although the following sections focus on national emissions reduction measures, such measures generally operate in conjunction with a suite of complementary measures at multiple levels of government that aim to reduce carbon

⁶² Climate Change Authority, 'Towards a Climate Policy Toolkit: Special Review of Australia's Climate Goals and Policies' (Report 3, Climate Change Authority, 2016) 49 <<http://www.climatechangeauthority.gov.au/reviews/special-review/towards-climate-policy-toolkit-special-review-australias-climate-goals-and>>.

⁶³ See for example, Jotzo, above n 37; Peter Christoff, 'On These Numbers, Australia's Emissions Auction Won't Get the Job Done', *The Conversation* (online), 26 April 2015, <<http://theconversation.com/on-these-numbers-australias-emissions-auction-wont-get-the-job-done-40761>>; Paul Burke and Frank Jotzo, 'Wrong Way, Go Back,' *Australian National University Crawford School of Public Policy* (online), 17 March 2014 <<https://crawford.anu.edu.au/news-events/news/3718/wrong-way-go-back>>; Peter Hannam and Johnathan Swan, 'Ross Garnaut Slams Abbott Government's Direct Action Policy as Like a 'Martian Beauty Contest'', *The Sydney Morning Herald* (online), 7 March 2014 <<http://www.smh.com.au/federal-politics/political-news/ross-garnaut-slams-abbott-governments-direct-action-policy-as-like-a-martian-beauty-contest-20140306-34atj.html>>.

⁶⁴ J Peel and H M Osofsky, *Climate Change Litigation: Regulatory Pathways to Cleaner Energy* (Cambridge University Press, 2015).

⁶⁵ For further recommendations on key policy tools for a low carbon transition, see Australian Panel of Experts on Environmental Law, *Energy Regulation* (Technical Paper 6, 2017).

emissions across the economy. While the idea of carbon pricing as a sole measure for climate change mitigation had substantial currency in Australia following the recommendations of the *Garnaut Review*,⁶⁶ ‘best practice’ from climate leader jurisdictions such as California and the EU suggests a diversified portfolio of measures is preferable. This diversified ‘toolkit’ approach, utilising a range of tailored measures, has also received support from the Climate Change Authority in its most recent review of Australia’s climate goals and policies.⁶⁷

3.3 Modifying the ERF and safeguard mechanism

Within the constraints of current national climate policy, there is the potential to modify the operation of the ERF to strengthen its potential as an emissions reduction measure. The avenue for doing so would be the safeguard mechanism, which establishes emissions baselines for covered businesses (see section 2.2.1).

Options for strengthening the safeguard mechanism would include:

- **increasing its coverage:** for instance, the carbon pricing mechanism applied to entities responsible for one or more facilities with annual direct emissions of 25,000 t CO₂-e (whereas the safeguard mechanism is limited to entities with annual direct emissions of 100,000 t CO₂-e or more). Even broader coverage could be achieved if entities were required to account for indirect emissions (emissions from electricity consumed or associated with the full life cycle of products, that is, scope 3 emissions).
- **increasing the stringency of baselines:** this might be achieved by selecting a different historical point for determining allowable emissions or by using best practice in the sector to establish sector-wide baselines. Progressive downward adjustment of baselines across time would provide incentives for continued emissions reductions by businesses.
- **inter-linkage with other schemes:** this would broaden the market for emissions reductions and enhance cost-effectiveness. It would allow businesses that cannot meet baselines to purchase credits from other creditable schemes (international, regional or in other countries) to meet their liabilities.

A strengthened safeguard mechanism would operate somewhat like a baseline-and-credit ETS, akin to the previous NSW GGAS scheme.⁶⁸ If the regulations governing baseline setting were to be tightened, coupled with measures allowing the purchase of international carbon credits in addition to ACCUs, the safeguard mechanism could operate as a form of market control on emissions levels.

As the detail of the safeguard mechanism’s operation is contained in legislative rules made by the government, it can be readily modified. The review of the ERF and safeguard mechanism scheduled for 2017 could provide an opportunity for these reforms.

While the ERF with a strengthened safeguard mechanism would still represent a second-best option to mandatory, economic-wide emissions reduction controls (on grounds of cost-effectiveness and scalability), it would nonetheless be a substantial improvement over the current policy that places limited controls on domestic emissions growth.⁶⁹

⁶⁶ R Garnaut, *Garnaut Climate Change Review* (Cambridge University Press, 2008); R Garnaut, *Update Paper 6: Carbon Pricing and Reducing Australia’s Emissions*, (2011 Update, Garnaut Climate Change Review, 2011). Since the Reviews, however, Professor Garnaut’s views appear to have changed with more recent op eds endorsing carbon pricing in conjunction with other measures such as the RET. See R Garnaut, ‘Climate Change: The Challenge for Australia’, *Sydney Morning Herald* (online), 15 June 2015 <<http://www.smh.com.au/environment/un-climate-conference/climate-change-prime-minister-tony-abbott-warming-to-bigger-greenhouse-cuts-20150622-ghubqk.html>>.

⁶⁷ Climate Change Authority, above n 62, 1.

⁶⁸ A Pears, ‘Direct Action could deliver a useful outcome: carbon trading’, *The Conversation* (online), 3 November 2014 <<http://theconversation.com/direct-action-could-deliver-a-useful-outcome-carbon-trading-33736>>. Baseline-and-credit ETS schemes set a baseline level of emissions, improvements upon which generate credits for participating firms: M Wilder and M Miller, ‘Carbon Trading Markets: Legal Considerations’ in T Bonyhady and P Christoff (eds) *Climate Law in Australia* (Federation Press, 2007) 68.

⁶⁹ In the interests of policy ‘stability’ the Climate Change Authority recommends strengthening the ERF to include more stringent safeguard measures for high-emitting sectors. In addition, the Authority recommends the introduction of an emissions-intensity scheme for electricity generators from 2018 that would employ baselines declining to zero by 2050. See Climate Change Authority, above n 62, Chapter 5.

3.4 Mandatory national emissions reduction measures

More ambitious policy and legal reforms to address climate change mitigation in Australia could draw on past experience with the carbon pricing mechanism as well as the wealth of experience available from other jurisdictions (see Table 2).⁷⁰

Table 2: Regulatory options for climate mitigation - experience from other jurisdictions

Regulatory model	Example	Details
Market-based (mandatory) Models		
Carbon tax	British Columbia carbon tax	Tax levied per tonne of carbon dioxide. Current tax of \$CAN30/tonne (approx. \$USD20/t). Regarded as the most significant carbon tax in the Western hemisphere.
Cap-and-trade ETS	EU ETS	Largest international system for trading emissions allowances covering 31 countries and around 45% of EU emissions. Applies to high-emitting energy and industrial facilities and aviation. Reductions of 21% from 2005 levels by 2020 and 43% by 2030 forecast.
Baseline-and-credit ETS	NSW GGAS	State greenhouse gas benchmark of 7.27 t of CO ₂ e of emissions from electricity per head of the state population. Electricity retailers and other parties involved in the NSW electricity market are required to meet mandatory benchmarks based on the size of its share in the state's electricity market. GGAS participants surrendered a prescribed number of GGAS certificates (or renewable energy certificates under the RET scheme) for any emissions above their individually assigned targets with certificates being transferable, thereby creating a market for their purchase.
Non market-based Models		
Direct regulation	US Clean Power Plan	National emissions standards for carbon pollution from power plants. The Environmental Protection Agency (EPA) establishes carbon dioxide emission performance rates with states and tribes choosing the measures employed to meet the standards.

These policy options have recently been the subject of comprehensive review by the Climate Change Authority, which discerns two general categories of market policies and non-market policies. The former encompass voluntary carbon pricing (such as the Direct Action/ERF mechanism as it currently exists with weak safeguards), mandatory carbon pricing (such as the former carbon pricing mechanism) and other mandatory price-based mechanisms (such as the RET).⁷¹ Non-market policies include regulatory measures, information programs and innovation support. The discussion below highlights two key policy measures - one market-based (emissions trading schemes) and one non-market based (direct regulation of emissions) - that have been the centrepiece of climate regulation in major emitting countries. It explains how these policy measures work in other jurisdictions and how they might be implemented in Australia

⁷⁰ For more information on policy options to regulate the energy sector, including the relative strengths of mandatory and non-mandatory policy mechanisms, see Australian Panel of Experts on Environmental Law, *Energy Regulation* (Technical Paper 6, 2017).

⁷¹ See Climate Change Authority, 'Draft Report: Australia's Climate Policy Options' (Report 2, Climate Change Authority, 2015) <<http://www.climatechangeauthority.gov.au/node/381>>.

as part of a reform program directed to increasing the ambition and effectiveness of the national climate mitigation response.

3.4.1 Direct regulation: The US example

Direct regulation involves the imposition and enforcement of mandatory emissions standards for emitting sources. Sources targeted by regulatory measures can include emitting facilities (for example, electricity generators and industrial facilities), buildings, agriculture or vehicles. As discussed in Australian Panel of Experts on Environmental Law, *Energy Regulation* (Technical Paper 6, 2017), Australia has regulatory measures in place for energy efficiency in buildings and appliances. However, no direct regulatory measures apply to emissions from electricity or transportation, two sectors that account for half of the national emissions.

Direct regulation fell out of favour in environmental policy during the 1990s and 2000s with the adoption of market-based approaches. The *Kyoto Protocol*, for example, endorsed the use of carbon markets to drive lowest-cost emissions reduction.⁷² This policy choice has been influential in the design of domestic climate measures as the discussion below of emissions trading schemes indicates.

The primary example of direct regulation in the climate field comes from power plant measures under the US *Clean Air Act*⁷³ (although a number of countries also use a regulatory approach for emissions from the transportation sector). It is worth noting that the former Obama Administration considered direct regulation a second-best regulatory approach; the Administration proposed a national cap-and-trade emissions trading program in 2009, but implementing legislation was defeated in Congress.⁷⁴ Ironically, it is likely that more stringent reductions in emissions will be achieved through direct regulation than would have occurred under a more business friendly market-based approach. Since under the current *Clean Air Act*, regulations stem from the executive branch, they are susceptible to change with future incoming administrations (and indeed, President Trump has indicated that these emissions reductions for coal plants will be rolled back). Implementation of the regulations has also been delayed by litigation, with businesses and states holding coal-based economies, challenging the EPA's mandate to regulate greenhouse gas emissions from power plants under the *Clean Air Act*.⁷⁵

EPA regulation of power plants under the *Clean Air Act* encompasses two main elements.⁷⁶ The first is the Carbon Pollution Standard for new, modified or reconstructed power plants. The emissions limits under this Standard are performance standards set at the degree of emissions limitation achievable through the application of the 'best system of emission reduction' that the EPA determines has been adequately demonstrated. The emissions level permitted under the Carbon Pollution Standard is one that effectively requires either the use of natural gas or partial carbon sequestration and capture. This Standard is implemented directly through federal rules under section 111(b) of the *Clean Air Act*.

The second element of the EPA's power plant rules, more complex and contentious, is the *Clean Power Plan* that applies to existing coal-fired power plants. This program aims to reduce carbon dioxide emissions from the power sector by 30% from 2005 levels by 2030. Drawing on a different section of the *Clean Air Act*, this regulation takes the form of emissions guidelines for states to follow in developing implementation plans for emissions reduction from existing plants. States have flexibility in designing emission standards to meet the guidelines; for instance, some states might use an emissions trading scheme (or a regional scheme of this kind) as part of their implementation, others might rely heavily on energy efficiency measures and so on. If a state fails to develop an implementation plan within the required timeframe then the EPA can develop a federal plan for that state.⁷⁷

⁷² *Kyoto Protocol* art 17 (emissions trading). See also Joint Implementation (art 6) and the Clean Development Mechanism (art 12).

⁷³ 42 USC § 7401 – 7671q (1963).

⁷⁴ *American Clean Energy and Security Bill*, H.R.2454, 111TH Congress (2009-2010).

⁷⁵ For the latest iteration of this litigation see *Murray Energy Corp et al v EPA* (DC Cir, 9 June 2015) dismissing as premature an industry suit seeking to prevent EPA from issuing a final *Clean Power Plan* rule regulating greenhouse gas emissions from existing power plants. However, in early 2016, the Supreme Court issued a stay preventing further implementation of the *Clean Power Plan* until after pending litigation in the DC Circuit is resolved.

⁷⁶ For further details of the EPA's greenhouse gas regulations see United States Environmental Protection Agency *Regulatory Initiatives* <<http://www.epa.gov/climatechange/EPAactivities/regulatory-initiatives.html>>.

⁷⁷ *Clean Air Act* 42 USC § 7410 (1963).

If Australia were to follow a similar direct regulatory model to that in the United States this would most likely require new stand-alone federal legislation as Australia has no equivalent to the US *Clean Air Act* (new legislation was also the preferred approach proposed in the discussion paper on ‘A Cleaner Future for Power Stations’ issued by the Gillard government).⁷⁸ Constitutional authority for the legislation would derive from the external affairs power as the legislation would be the basis for implementation of Australia’s commitments under international climate treaties. Following the U.S. model, emissions standards could be set for both existing, and new or modified, power plants as well as other high-emitting facilities.

3.4.2 Emissions trading schemes

The other major category of regulatory measures used to achieve mandatory emissions reductions is market-based instruments. The most common market-based instruments are carbon taxes and emissions trading schemes (ETS) (see Table 3).

TABLE 3: CARBON TAX VERSUS ETS

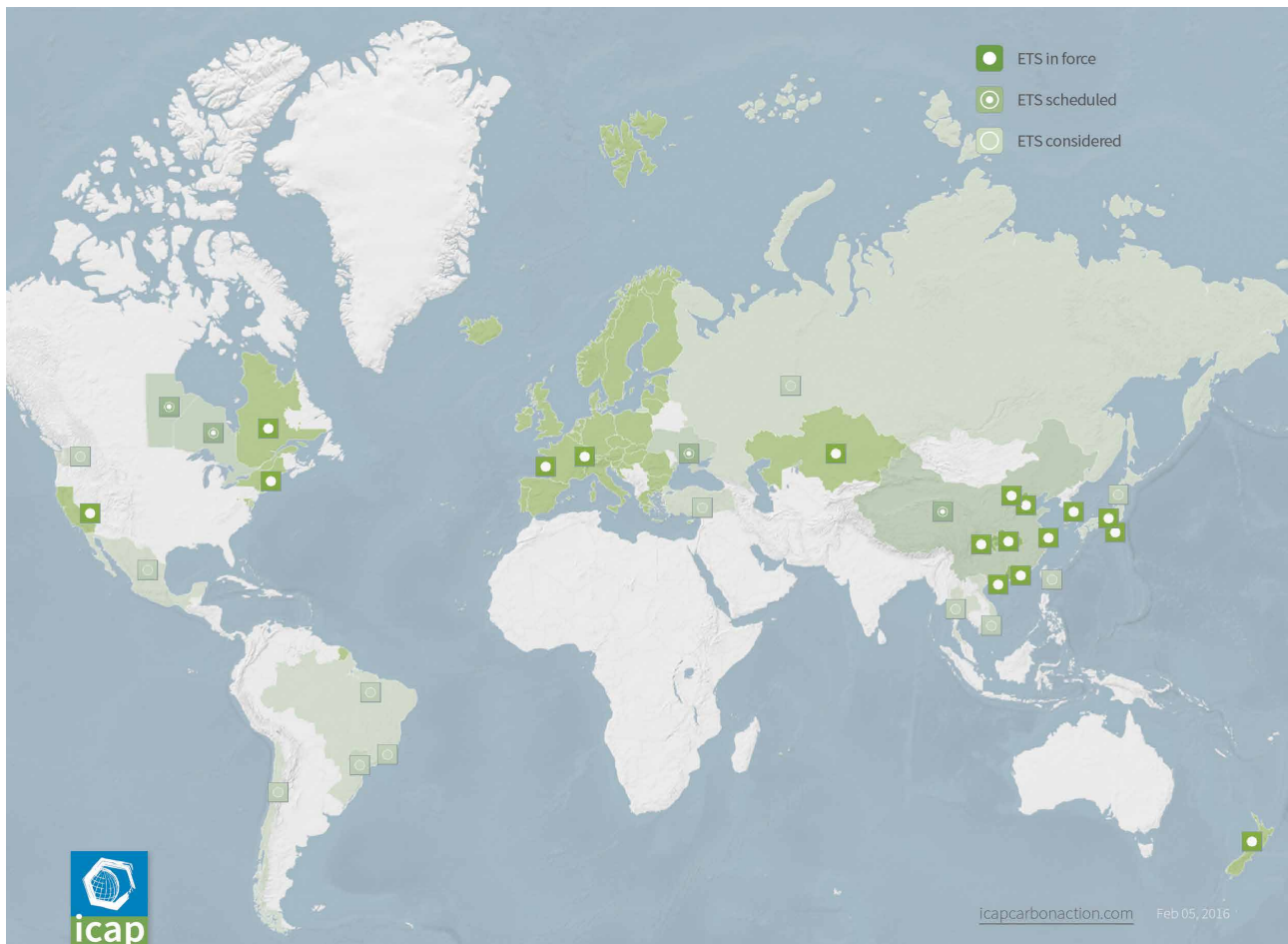
A carbon tax places a levy on the price of a product that (in an ideal world) should reflect the social cost of the associated greenhouse pollution. Businesses are then free to decide what quantity of pollution reduction to offer in response. At their core, carbon taxes involve taxing or charging the carbon content of fuels or greenhouse gas emissions. The basic theoretical premise is the need to correct for the externalisation of the environmental costs associated with carbon emissions. The main advantage of a carbon tax is seen to be its cost-effectiveness as carbon abatement can be delivered at a known cost. On the other hand, this mechanism offers less flexibility to business and the overall amount of carbon abatement delivered is uncertain as it depends on the stringency of the tax and the response of business.

While an ETS also involves a price signal, it operates on a different principle by controlling quantity (the number of emission permits available for emission reduction) rather than price. Under a cap-and-trade ETS, the number of permits to emit greenhouse gas emissions is limited and progressively reduced over time. The advantage of this system is that it delivers certain, quantifiable emissions reductions with flexibility to business given the capacity for trading of permits. The disadvantage of ETS is that the market is susceptible to price fluctuation (and crash) and that a significant regulatory apparatus is necessary to manage the new carbon market that is created.

Although many economists continue to favour a carbon tax as a superior market policy instrument (and a number of jurisdictions operate carbon taxes), ETS have emerged as the most politically palatable option for combining a commitment to mandatory carbon pricing with a cost-effective market-based regulatory approach. Consequently, ETS are the most widely adopted policy measure for emissions reduction globally (see Figure 1 below). The ETS is also a tool that has enjoyed (at times) bipartisan support in Australia.

⁷⁸ See Department of Energy, Resources and Tourism, ‘A Cleaner Future for Power Stations’ (Interdepartmental Task Group Discussion Paper, 2010) <<http://industry.gov.au/Energy/Documents/sustainability-and-climate-change/DiscussionPaperCleanerFuturePowerStation.pdf>>.

Figure 1: ETS globally



Source: (International Carbon Action Partnership, <https://icapcarbonaction.com/ets-map?view=etsmap>)

The basic premise of an ETS (at least in the most common ‘cap-and-trade’ variant) is that emissions are capped relative to a historical baseline. Covered entities under the scheme can either choose to meet the cap through activities that reduce emissions (or sequester carbon) or to buy allowances from other covered entities or market participants who reduce below the cap and hence generate emissions credits. To be effective as an environmental measure, the cap must be sufficiently stringent and should decline incrementally over time.

While the essential structure of an ETS is well-settled, experience with this policy instrument has shown that the devil is in the detail; specifically, design of the ETS matters enormously to its success as a climate mitigation measure. The vast literature on the failures of the early iterations of the European Union ETS - particularly the problem of over-allocating permits to emitters - emphasises this point.⁷⁹ Key design questions (from an environmental effectiveness rather than a market effectiveness point of view) include:

- how to ensure the cap is set at a sufficiently stringent level in light of the best available climate science and reduced appropriately over time;
- how to allocate permits to covered entities, for example, an auction process for allocation is more efficient, but

⁷⁹ Amongst many examples, see A D Ellerman et al, *Pricing Carbon: The European Union Emissions Trading Scheme* (Cambridge University Press, 2010); S Bogojevic, *Emissions Trading Schemes: Markets, States and Law* (Hart, 2013).

business often favours a grandfathered approach where initial permits are allocated for free based on historical emissions levels; and

- whether and to what extent trading will be allowed outside the cap, for example, through linkage to other ETS, through the inclusion of carbon offsets etc.⁸⁰

In the long-term it is likely that Australia will return to some form of a price on carbon; this certainly seems to be the expectation of businesses.⁸¹ The federal Opposition, for example, has committed to pricing carbon if it wins government, with a cap-and-trade ETS as the centrepiece policy measure for doing so.⁸² While there is no one-size-fits all prescription for an ideal ETS, scheme design in Australia could draw on the wealth of experience and lessons from other jurisdictions including the European Union, New Zealand and California. The Coalition government has indicated an ETS is 'off the table', but there is nonetheless potential for the ERF to evolve into an ETS over time as described in section 3.3 above.

⁸⁰ D M Driesen, 'Design, Trading, and Innovation' in J Freeman and C D Kolstad (eds), *Moving to Markets in Environmental Regulation* (Oxford University Press, 2007) 436.

⁸¹ F Jotzo, 'The CCEP Australia Carbon Pricing Survey 2012: Policy Uncertainty Reigns but Carbon Pricing Likely to Stay' (2012) 45(4) *Australian Economic Review* 395.

⁸² H Aston and L Cox, 'Bill Shorten faces grassroots Labor push to get serious on climate targets', *Sydney Morning Herald* (Sydney), 19 May 2015. A comprehensive approach to addressing Australia's carbon footprint would also require the inclusion of scope 3 emissions from Australian coal, an issue not currently addressed in the Labor climate policy.

4. Next-generation Australian climate law

This *Technical Paper* has considered Australian climate law for greenhouse gas emissions reduction with a strong focus on current legislation and policies, and options for reform in the short-to-medium term. It has put forward recommendations for the strengthening of Australia's present emissions reduction targets (for the periods up to 2020 and 2030) and for improving the effectiveness of measures to implement such targets.

In these *Technical Papers*, APEEL has also sought to consider what Australia's 'next generation' environmental laws should look like. It is the nature of climate law and policy to be forward-looking; climate science tends to speak in terms of changes likely to take place over this century and targets for emissions reduction are often formulated in terms of long-term future commitments, for example, in respect of 2030, 2050 etc. Taking this longer-term view, what does APEEL foresee as the elements of next-generation of climate change mitigation laws in Australia?

It is now clear as a matter of climate science and international law that the next few decades will need to see very rapid reductions in greenhouse gas emissions towards net zero carbon (and after that to negative emissions) to stabilise temperature rises at safe and sustainable levels.⁸³ In Australia this will require laws providing for:

- ambitious emissions reduction targets seeking progressive reductions in emissions up to 2050 when emissions should be close to zero or below zero (for instance, through deployment of carbon sequestration in sinks such as forests or through carbon capture and storage technologies);
- a national carbon price to provide a cost-effective mechanism for driving economy-wide emissions reductions and technological innovation for clean energy;
- phasing out fossil fuel energy sources and fossil fuel production by 2050 or earlier to avoid financial risks of stranded assets in an increasingly carbon-constrained world (the *Paris Agreement* aims for a 'balance' between emissions from sources and extractions by sinks, that is, oceans and forest, by the second half of the century; a goal which cannot be achieved without foregoing carbon intensive fossil fuels or drastically ramping up carbon capture and storage capacity); and
- a range of complementary measures at the national and sub-national levels designed to enhance energy efficiency, increase renewable energy uptake, and encourage low-carbon resilient development.

⁸³ See above n 20 and Rogner et al, above n 21: climate science indicates that a high level of risk is associated even with achievement of the 2°C warming threshold. This has spurred the international policy shift towards aiming to keep temperature rises to 1.5°C, with even that level considered insufficient to protect and preserve highly vulnerable ecosystems such as coral reefs.

APEEL



The Australian Panel of Experts
on Environmental Law

ENERGY REGULATION

TECHNICAL PAPER 6

APEEL



The Australian Panel of Experts
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About APEEL

The Australian Panel of Experts on Environmental Law (APEEL) is comprised of experts with extensive knowledge of, and experience in, environmental law. Its membership includes environmental law practitioners, academics with international standing and a retired judge of the Federal Court. APEEL has developed a blueprint for the next generation of Australian environmental laws with the aim of ensuring a healthy, functioning and resilient environment for generations to come. APEEL's proposals are for environmental laws that are as transparent, efficient, effective and participatory as possible. A series of technical discussion papers focus on the following themes:

1. The foundations of environmental law
2. Environmental governance
3. Terrestrial biodiversity conservation and natural resources management
4. Marine and coastal issues
5. Climate law
6. Energy regulation
7. The private sector, business law and environmental performance
8. Democracy and the environment

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Summary and Recommendations

Executive Summary

This *Technical Paper* aims to map and critically evaluate Australia's energy regulation landscape with a view to: (a) characterising strengths and weaknesses in Australia's current energy regime; and (b) recommending policies that can encourage and facilitate Australia's transition to a low-carbon economy. It argues that no single policy instrument can deliver a sustainable energy future, but that a range of measures can all make important contributions, including carbon pricing, mandatory renewable energy targets, energy efficiency measures, and capital subsidies for constructing or installing renewable energy technologies and storage capabilities. In contrast, the Turnbull government's *Direct Action Plan* is unlikely to play any substantial role in achieving a transition to a low-carbon economy and many of the government's other policies are antithetical to that objective.

Specific recommendations include:

Meeting energy needs while simultaneously transitioning to a low carbon economy is the central challenge of energy governance. To deliver on these twin goals APEEL recommends the next generation of Australian energy laws and regulation should incorporate the following:

6.1 Key Policy Tools for a Low-Carbon Transition:

- (a) *impose a price on carbon;*
- (b) *introduce or reinforce renewable energy and low-carbon incentives;*
- (c) *reinstate a robust and certain Renewable Energy Target (RET);*
- (d) *maintain or extend the role of the Clean Energy Finance Corporation (CEFC);*
- (e) *facilitate energy efficiency and storage capacity;*
- (f) *remove fossil fuel subsidies; and*
- (g) *supply side measures to limit fossil fuel extraction to discharge Australia's fair contribution to meeting the global carbon budget.*

6.2 Policy Design Guidelines:

- (a) *develop complementary combinations of policy tools; and*
- (b) *promote policy stability to encourage further investment in renewables.*

HOW TO CONTRIBUTE TO THE APEEL PROJECT

APEEL invites you to provide your responses to the ideas and recommendations presented in this paper. This will assist the development of our final proposals for the next generation of Australian environmental laws.

We look forward to your engagement on specific reform options as the APEEL journey progresses.

Please send your responses to: admin@apeel.org.au or go to www.apeel.org.au where you can do so online.

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1. Introduction: towards an energy revolution?

Traditionally, governments took the view that the principal role of energy policy was to secure the supply of reliable and affordable energy. However, there is a growing recognition of the need for what the International Energy Agency (IEA) calls an ‘energy revolution’, and for energy policies to facilitate a rapid transformation to a low-carbon, efficient and environmentally benign system of energy supply.¹ The urgency of doing so was underlined by the *Paris Agreement*, and by the increasingly alarming science as to the pace of climate change.² Since energy production and consumption accounts for approximately 65% of all greenhouse gas (GHG) emissions,³ achieving such a transformation of the energy sector is becoming a key pillar of GHG mitigation strategy.

Fundamental to achieving such an energy revolution is government policy and the instruments it uses to achieve its objectives. As a convenient shorthand, this paper refers to these as energy ‘regulation’, a term which is broadly conceived and includes government interventions that are: prescriptive (variously termed ‘direct’ or ‘command and control’ regulation); ‘steering’ mechanisms such as economic incentives and disincentives; and reporting mechanisms. This paper describes ‘energy’ to include: electricity generation (whether from fossil fuels or renewables) and the practice and potential for promoting and harnessing ‘clean energy’ (renewables, clean technology and energy efficiency as measured by carbon emissions). The paper does not discuss the decarbonisation of energy consumed for transportation, nor does it examine nuclear energy regulation in Australia given that no electricity production currently comes from nuclear sources.

As energy regulation takes on new roles it becomes closely entwined with climate change law and with a number of the mechanisms described in Australian Panel of Experts on Environmental Law, *Climate Law* (Technical Paper 5, 2017). This *Technical Paper* is confined to a discussion as to what is distinctive about these mechanisms in terms of energy regulation while exploring in more detail other instruments that are energy-specific.

1.1 The current regulatory landscape

Meeting energy needs while simultaneously transitioning to a low carbon economy is the central challenge of energy governance. Notwithstanding the merits of a global or regional approach, the principal instruments of energy regulation have been developed mostly at national or sub-national levels. It is regulation at these levels that is the subject of the following discussion.

1.2 Governmental priorities: deregulation, competition and efficiency

As is apparent from the 2015 *Energy White Paper*, the federal government’s priorities in terms of energy policy are deregulation, competition and efficiency. However, the assumption that the principal aim of the energy regime should be economic efficiency and that the best way to achieve this is through a competitive and untrammelled market, thereby meriting deregulation and privatisation, is questionable. Given the urgency of climate change mitigation, it is equally important that the energy regime facilitates a rapid transformation to a low-carbon economy. Deregulation and the unconstrained market can be seriously detrimental to that goal.⁴

¹ International Energy Agency, *World Energy Outlook 2008* (2008), 37.

² See for example, the recent reports and statements of the World Meteorological Organization, available at <<https://public.wmo.int/en/media/press-release/global-climate-breaks-new-records-january-june-2016>>.

³ International Energy Agency, *Emissions from Fuel Combustion* (2009) <<http://www.wri.org/publication/content/8601>>; Global CCS Institute 2011, *Energy Fact Sheet* <<http://www.globalccsinstitute.com/publications>>.

⁴ L Godden and A Kallies, ‘Electricity Network Development: New Challenges for Australia’ in MM Roggenkamp, L Barrera-Hernandez, D N Zillman and I Del Guayo (eds), *Energy Networks and the Law: Innovative Solutions in Changing Markets* (Oxford University Press, 2012), 298.

Amongst the issues that government policy in general, and the *Energy White Paper* in particular, conveniently sidesteps is how energy policy might compensate for the fact that current renewable technologies are substantially disadvantaged when compared to fossil fuels. Not only do the latter benefit from substantial government subsidies, but they also gain advantage from economies of scale and ease of connection with existing electricity transportation networks designed for their use. For example, generation is commonly located adjacent to coal mines, but a long way from where many renewable sources are likely to be located. Moreover, there have also been legislative changes that have allowed for increased market concentration that advantages incumbent players and decreases competition.⁵

Crucially, without government intervention, it will be difficult to integrate intermittent generation from renewable energy providers and to facilitate their connecting to either a transmission or distribution network. Scaled up renewable energy can only be transported to consumers if generators have adequate grid access and networks are adjusted and extended to facilitate this, including through a shift from centralised to distributed forms of electricity generation. In the absence of government intervention with regard to all of the above, existing 'path dependencies'⁶ for infrastructure development are likely to become further entrenched, placing additional barriers in the way of the growth of renewables.

In summary, without the reform of network regulation, the growth of renewable energy in Australia will be stunted.⁷ Government intervention is required at most nodal points along the energy pipeline, particularly to facilitate transmission investment decisions, augment emerging renewable energy and low-carbon markets, and expedite grid-level storage.

5 Ibid.

6 T Daintith, *Finders Keepers? How the Law of Capture Shaped the World Oil Industry* (Routledge, 2010), ch 1.

7 T Wood and T Edis, *No Easy Choices: Which Way to Australia's Energy Future?* (Grattan Institute, 2012) 11, 21 <http://grattan.edu.au/wp-content/uploads/2014/04/124_energy_no_easy_choices.pdf>.

2. Energy regulation: policy options

So what key policy options in energy regulation can facilitate a timely transition to a low-carbon economy? In this section, the *Technical Paper* examines the current regulatory approaches in Australia and recommends options that can facilitate a low-carbon transition and in terms of placing a price on carbon, other market-based and economic instruments, energy efficiency and direct regulation.

2.1 Direct Action vs. carbon pricing

As discussed in Australian Panel of Experts on Environmental Law, *Climate Law* (Technical Paper 5, 2017), Australia commenced a carbon pricing mechanism in July 2012 under the *Clean Energy Act 2011* (Cth). Yet notwithstanding the strength of the evidence in favour of such market-based mechanisms,⁸ this scheme and supporting legislation were repealed in 2014. Instead, the Coalition Government instigated a *Direct Action Plan* as its principal mechanism to cut emissions to 5% below 2000 levels by 2020. However, for reasons discussed in *Technical Paper 5*, the *Direct Action Plan* is not only misleadingly named, but also unlikely to facilitate the requisite carbon emissions within the required timeframe. In short, Direct Action 'is inequitable, inefficient, and unlikely to lower emissions at a pace that is sufficient'⁹ to genuinely kick-start an energy transition to a low-carbon economy and consistent with the aspirations of the *Paris Agreement*. In stark contrast, the policy tool of pricing carbon provides a potentially efficient and effective mechanism for reducing carbon emissions (although as discussed at 3.1.2 below, this should only be as one component of a broader instrument mix).

2.2 The Rise and Fall (and Rise) of the Renewable Energy Target

The current Coalition Government also inherited the Renewable Energy Target (RET). This was created in 2001 as a means of promoting renewable energy technology and investment.¹⁰ It creates a market for tradable certificates for renewable energy generation. Electricity generators may then purchase certificates to such a value as will enable them to meet the RET.¹¹ As such, the RET is quantity-driven and generation-based and requires a minimum threshold of renewably sourced electricity to be generated by a certain date.

Due to the RET, electricity utility companies have sought to increase supplies of renewable energy, which in turn has incentivised investment in renewable energy sources and enlarged renewable energy and clean technology markets. Utilities prove compliance with RET requirements through the use of tradeable renewable energy credits for large-scale projects and solar credits for small-scale projects.

Standards such as the RET are both effective and efficient, because, while prescribing socially preferred outcomes, they leave the means of achieving them up to regulatees, thereby providing incentives for least cost solutions. This appears to be the case in practice as well as in theory, with the available evidence suggesting that the RET is one of the most cost effective emissions reductions policies available.¹²

To date, GHG emissions have been reduced by 22.5 million tonnes of carbon dioxide as a direct consequence of the RET. This is equivalent to 10% of Australia's annual electricity emissions.¹³ Into the future, the RET will continue to reduce carbon emissions by up to 58 million tonnes (2015–2020), a figure equal to annual emissions from all of

⁸ Ibid, and see references therein.

⁹ J Hewson, *Why there's no room for agnostics in the climate change debate* (World Economic Forum, Agenda, 30 July 2015) <https://agenda.weforum.org/2015/07/why-theres-no-room-for-agnostics-in-the-climate-change-debate/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+world-economic-forum-blog+%28Forum%3ABlog%29>.

¹⁰ N Durrant, *Legal Responses to Climate Change* (Federation Press, 2010) 127.

¹¹ *Renewable Energy (Electricity) Act 2000* (Cth) Part 2.

¹² Petra Stock, 'Giga-What? Explaining Australia's Renewable Energy Target' (Climate Council of Australia, 2015) <<http://www.climatecouncil.org.au/uploads/2251bb7f97f127289efc9a8a3566c2c1.pdf>>.

¹³ Ibid 1.

Australia's passenger cars and light commercial vehicles.¹⁴ The RET has also been successful from an economic and investment standpoint. To date, more than 400 additional large-scale renewable power stations have been built,¹⁵ and nearly 1.4 million rooftop solar photovoltaic systems have been installed.¹⁶

Contrary to the prevailing view in the Coalition Government, another benefit of the RET is that it reduces wholesale electricity prices and delivers a net financial benefit in the long term. This reduction in wholesale electricity prices is now acknowledged and is brought about through the merit order effect - an artefact of the current electricity market.¹⁷

Also of note is the finding of the Australian Energy Market Commission that the RET currently accounts for only approximately 4% of a consumer's bill, and that this will decrease to 3% in 2015/16.¹⁸ Furthermore, the RET has driven down the cost of wholesale energy, far offsetting the costs of the scheme.

Similarly, as the Australian Energy Market Operator has reported, the widespread uptake of small-scale solar photovoltaic systems and solar hot water (incentivised by the small-scale RET) has contributed to overall reductions in demand, leading to the reduction of wholesale prices.¹⁹ Modelling by ROAM Consulting has reached a similar conclusion.²⁰

Yet, notwithstanding the overall success of the RET, legislative amendments were passed on 23 June 2015 that revised the target substantially downwards despite the threat that this causes both to the renewables industry and its investment community.²¹ In addition to concerns that this lower target is insufficient to incentivise jobs and investments in the renewable sector, the amended RET legislation now includes wood waste burning of logged forests as a renewable source (something critics regard as entirely spurious).

It is clear that a robust and certain RET is required as part of the policy matrix for a low-carbon transition. Indeed, at a time when the federal government lacks leadership in this regard by both weakening the RET and abolishing the carbon price, Australian states and territories have an opportunity to step in and provide stable investment environments for renewable energy. At state level, South Australia and the Australian Capital Territory (ACT) both have ambitious RETs, with the former committed to a 50% renewable target for 2025 and the latter aiming to supply 90% of electricity consumed in the ACT from renewable sources by 2020. South Australia also has a detailed Renewable Energy Plan,²² which aspires to make that state the most attractive investment destination for renewable energy. It contemplates regulation to provide renewable energy developers with access to Crown land subject to pastoral leases, and to support the design and implementation of community-owned solar. For a summary of state initiatives see Table 1 below.

¹⁴ Ibid 11.

¹⁵ Climate Change Authority *Renewable Energy Target Review Report* (Australian Government, Canberra, 2015) 18 <<http://www.climatechangeauthority.gov.au/files/files/reviews/ret/2014/review.pdf>>.

¹⁶ Clean Energy Regulator, *'Small-Scale Installations by Postcode'* (Australian Government, Canberra, 2015) <<http://www.cleanenergyregulator.gov.au/RET/Forms-and-resources/Postcode-data-for-small-scale-installations>>.

¹⁷ D McConnell, 'Electricity Prices Fall: Renewable Energy Deserves Merit', *The Conversation* (12 April 2013) <<https://theconversation.com/electricity-prices-fall-renewable-energy-deserves-merit-13300>>.

¹⁸ Australian Energy Market Commission, *'Residential Electricity Price Trends Report'* (Australian Energy Market Commission, 2013) <<http://www.aemc.gov.au/Media/docs/2013-Residential-Electricity-Price-Trends-Final-Report-723596d1-fe66-43da-aeb6-1ee16770391e-0.PDF>>.

¹⁹ Australian Energy Market Operator, *National Electricity Forecasting Report*, (Australian Energy Market Operator 2013) 1-3.

²⁰ J Gilmore and C Giacomantonio, *'Renewable Energy Target Policy Analysis'*, ROAM Consulting Pty Ltd for the Clean Energy Council (2014).

²¹ S Small, 'Stand-Off Continues on Australia's Renewable Energy Target', *ABC News* (16 March 2015) <<http://www.abc.net.au/pm/content/2015/s4198744.htm>>; see also ABC News, 'Renewable Energy Target Resolution Needed to Improve Regional Investment Opportunities Says AWU', *ABC News* (4 May 2015) <<http://www.abc.net.au/news/2015-05-04/union-calls-for-renewable-energy-target-resolution/6441864>>.

²² Government of South Australia, *A Renewable Energy Plan for South Australia* (Renewables SA, 2011) <<http://www.renewablesa.sa.gov.au/files/111019-renewable-energy-plan-for-south-australia.pdf>>.

TABLE 1: KEY STATE AND TERRITORY DEVELOPMENTS IN RENEWABLE ENERGY

The states have historically led the way on emissions and renewable energy policy, influencing national action. For example, in 2004 and 2006 respectively, South Australia and Victoria introduced state based renewable energy targets in response to a low 2% federal target.

Due to the ambivalent federal policy environment, South Australia is now the most desirable market in Australia for investment. Since 2003, there has been \$5.5 billion invested in renewable energy in South Australia, with nearly half occurring in regional areas.

South Australia sources over 36% of its electricity from renewable sources and 25% of South Australian homes have solar PV panels. South Australia has installed more large-scale renewable capacity since 2001 than any other state.

With effective renewable energy policies, South Australia has moved from having little renewable energy a decade ago to installing the most renewable energy since 2001 on a total and per capita basis.

The ACT also has effective emissions reduction targets and a renewable energy target of 90% by 2020. Other than South Australia and the ACT, no other Australian states have a current target to increase renewable energy.²³

Source: *The Australian renewable energy race: Which States Are Winning or Losing?* The Climate Council of Australia, 2014.

2.3 Feed-in tariffs

2.3.1 Feed-in tariffs

All sub-national jurisdictions have introduced some form of feed-in tariff (FIT). In broad terms, such schemes seek to accelerate investment in renewable energy technologies by paying a guaranteed tariff to large renewable energy producers (for example, wind farms and biogas producers) and/or small ones (for example, domestic solar photovoltaics). The general aim is to set a price for each individual renewable technology, reflecting its particular level of costs to produce and provide sufficient incentive for such production. In other words, FITs provide cost-based compensation to renewable energy producers and sufficient certainty through long-term contracts to make their investments commercially viable.²⁴

Currently, FITs are the most widely used policy in the world for accelerating renewable energy deployment, and there are a considerable number of success stories. For example, there is evidence that, in the European context, FITs have not only been more effective than tradable certificate schemes (see *Mandatory Obligation Schemes* below), but also more efficient,²⁵ although the latter claim is contestable.²⁶ A great deal depends on the design of individual regulatory schemes with the evidence suggesting that they are most likely to succeed where they involve 'the combination of long-term fixed price or premium payments, network connections, and guaranteed purchase of all RE [Renewable Energy] electricity generated'.²⁷

²³ At the time of writing, Victoria is considering such a target.

²⁴ M Mendonça, D Jacobs and B K Sovacool, *Powering the Green Economy – the Feed-In Tariff Handbook* (Earthscan, Oxford UK, 2009).

²⁵ V Lauber, 'Tradeable Certificate Schemes and Feed-In Tariffs: Expectation vs Performance' in V Lauber (ed) *Switching to Renewable Power* (Earthscan, 2012).

²⁶ For a contrary view see Australian Government Productivity Commission, *Carbon Emission Policies in Key Economies: Productivity Commission Research Report* (2011) 81 <<http://www.pc.gov.au/inquiries/completed/carbon-prices/report/carbon-prices.pdf>>; A Macintosh, 'Searching for Public Benefits in Solar Subsidies: A Case Study on the Australian Government's Residential Photovoltaic Rebate Program' (2011) 30 *Energy Policy* 3199, 3207 arguing that subsidising photovoltaic (PV) energy systems (whether by feed-in-tariffs or other subsidies) achieves a relatively small reduction in emissions at an exceptionally high average abatement cost, while providing disproportionate benefits to the relatively wealthy.

²⁷ Intergovernmental Panel on Climate Change (IPCC), *The IPCC's Fifth Assessment Report (AR5)* (2014) 23.

It is also the case that ‘inevitably [feed-in tariff] rates are set at higher levels than would be necessary to induce the least-cost mix of renewables and the overall resource cost of using a particular level of renewables will be higher than under a [renewable energy certificate] scheme’.²⁸ For reasons such as these, some jurisdictions continue to favour tradable certificates (green certificates).

Moreover, FITs appear to be considerably more effective than government grants. For example, in the same three-and-a-half year period during which the Australian federal solar grant program produced nothing, the German FIT scheme delivered over 100 times the capacity of one proposed Australian project.²⁹ Indeed, some have argued that grant-tendering schemes have been so ineffective that ‘if governments tried to use them to meet Australia’s target of a 5% reduction in emissions over 2000 levels by 2020 they would need to spend another AU\$100bn’.³⁰

The various state schemes appear to have been effective in facilitating unprecedented growth of distributed generation on the network with consumers generating their own electricity mostly in the form of rooftop solar photovoltaic panels in recent years.³¹ Indeed, rapid reductions in photovoltaic prices combined with higher electricity prices in Australia have ensured considerable growth in consumer demand for electricity generation from renewable sources.³²

2.3.2 Mandatory obligation schemes

Certain jurisdictions have adopted mandatory obligation schemes that, for the most part, include provision for tradeable certificates documenting the amount of energy being saved in tandem with an obligation to achieve a specified level of energy savings, subject to a financial penalty if this is not achieved (known internationally as ‘white certificates’).³³ Specifically, a range of state-based ‘mandatory obligation’ schemes require duty holders (usually energy retailers) to meet certain targets with regard to the use of renewable energy or energy efficiency.

This mechanism has several advantages. The combination of an obligation with a market mechanism allows competition in the delivery of energy services towards the targets and should guarantee that energy savings will occur in the most cost-effective manner.³⁴ The experience of a number of existing schemes suggests that they are flexible and effective in delivering considerable energy savings in practice as well as in theory.³⁵

Nevertheless, they are not problem-free. Certificate markets take time to develop and become established,³⁶ and are therefore impractical if policymakers require demonstrable short-term energy savings. Additionally, certificate schemes must represent accurate, verifiable and credible energy saving data without which they will lack credibility.³⁷ Such data may demonstrably be available for a standard fluorescent lightbulb, however when energy savings are dependent on, amongst other factors, installation conditions and time-dependent factors, then maintaining credibility becomes difficult and resource intensive. For example, the associated energy savings from high efficiency windows depends on the window’s characteristics, its installation, weather conditions and the occupant’s temperature preferences. Since market systems depend heavily on certificate credibility and buyer trust, uncertainties surrounding the energy savings a certificate represents can threaten a certificate program’s viability. However, notwithstanding these challenges, well-designed white certificate schemes are a cost-effective and efficient mechanism through which to achieve greater energy efficiency.³⁸

28 Australian Government Productivity Commission, above n 27.

29 D McConnell, ‘Not Dead Yet: Flagship ‘Collapse’ Only Part of Australia’s Solar Story’, *The Conversation* (10 February 2012).

30 J Daley, and T Edis, ‘Markets Still Best Option to Reduce Greenhouse Gas Emissions’ (Grattan Institute, 2011) <<http://grattan.edu.au/news/markets-still-the-best-option-to-reduce-greenhouse-gas-emissions>>.

31 Department of Industry and Science (Cth) ‘Mandatory Obligation Schemes, Energy Efficiency Exchange’ <<http://eex.gov.au/business-support/grants-funding/mandatory-obligation-schemes/>>.

32 Department of the Prime Minister and Cabinet, *Renewable Energy Target Scheme - Report of the Expert Panel* (2014).

33 See generally Department of Industry and Science (Cth), above n 32.

34 M Pavan, ‘Tradable White Certificates: Experiences and Perspectives’ (2012) 5 *Energy Efficiency* 83, 83.

35 D Crossley, ‘Tradeable Energy Efficiency Certificates in Australia’ (2008) 1 *Energy Efficiency* 267; M Pavan, above n 35, 83; L G Giraudet, L Bodineau and D Finon, ‘The Costs and Benefits of White Certificates Schemes’ (2012) 5 *Energy Efficiency* 179, 189; M Tansue and F A Felder ‘Comparison of Energy Efficiency Incentive Programs: Rebates and White Certificates’ (2010) 18 *Utilities Policy* 103, 103.

36 M Tansue and F A Felder, ‘Comparison of Energy Efficiency Incentive Programs: Rebates and White Certificates’ (2010) 18 *Utilities Policy* 103, 106.

37 Ibid.

38 Giraudet, Bodineau and Finon, above n 36, 180; L A Mundaca and L Niej ‘A Multi-Criteria Evaluation Framework for Tradeable White Certificate Schemes’ (2009) 37(11) *Energy Policy* 4557, 4557.

2.4 Energy efficiency

In principle, energy efficiency should provide considerable opportunity for ‘win-win’ outcomes or at the very least, for realising a reduction in carbon emissions at a low cost,³⁹ and indeed usually at a substantially lower cost than most other carbon emission reduction technologies.⁴⁰

However, energy efficiency, notwithstanding the extent to which it often provides win-win solutions and a cost-effective means of reducing GHG emissions, has not been immune from the deregulatory agenda of the federal government. Under the ‘cutting red tape’ agenda, the *Energy Efficiency Opportunities (Repeal) Act* (Cth) was passed in 2014, with only Greens senators in opposition. As the Energy Efficiency Council has pointed out, the repeal is a backwards step given that the original *Energy Efficiency Opportunities Act 2006* (Cth), which required reporting to raise the profile of a business’s opportunities and performance, was regarded by the IEA as world-class and had considerable economic and environmental benefits which far exceeded costs.⁴¹

Nevertheless, the *National Strategy on Energy Efficiency* (the *Strategy*), a ten-year strategy (from 2009-2020) under which a package of 37 measures to improve energy efficiency had been established, remains current. The *Strategy* contemplates a variety of measures embracing all sectors of the economy and aims to:

- address market failures and other barriers that impede the take-up of energy efficiency opportunities;
- help households and businesses to reduce their energy consumption and costs;
- develop and adopt new energy efficient technologies, and enhanced innovation in energy-using products and processes; and
- enable governments to demonstrate leadership through energy efficiency within their own operations.⁴²

The *Strategy* is underpinned by an *Intergovernmental Agreement (National Partnership Agreement on Energy Efficiency 2009)* that specifies action to be taken by the Commonwealth, states and territories to maximise cost-effective energy efficiency gains across the economy.

Notwithstanding the ‘win-win’ nature of many energy efficiency opportunities in the abstract, regulatory intervention is commonly required to facilitate their uptake, given the often considerable barriers confronting those who might wish to take advantage of them. As the IEA has pointed out, these barriers include: **imperfect information** (for example, when a consumer buys an appliance, but there is insufficient or inaccurate information provided on the energy performance of the product); **principal-agent problems** (for example, landlords are commonly responsible for buying electrical appliances such as refrigerators for their properties, but it is only the tenant who will benefit from reduced electricity bills from buying energy efficient products); and **behavioural failures** (for example, personal decisions made by consumers that appear not to be economically rational).⁴³ It is also commonly the case that ‘the initially higher purchasing costs will be recouped only in the longer term, and this longer-term horizon apparently does not inform purchasing decisions’.⁴⁴

Notwithstanding these obstacles, there are a variety of policy mechanisms that might be used to facilitate, incentivise or mandate improved energy efficiency. This paper addresses below the most significant available options, including direct fiscal incentives, informational regulation, and direct regulation.

39 See generally Department of Climate Change and Energy Efficiency (Cth), *Report of the Prime Minister’s Task Group on Energy Efficiency* (July 2010) <<http://www.thefifthestate.com.au/wp-content/uploads/2010/10/report-of-the-prime-ministers-task-group-on-energy-efficiency.pdf>>.

40 ClimateWorks Australia, *Energy Efficiency* <<http://climateworks.com.au/sectors/energy-efficiency>>.

41 Energy Efficiency Council, Submission 14 to Senate Standing Committee on Economics, *Inquiry into the Energy Efficiency Opportunities (Repeal) Bill 2014* 20 June 2014 <<http://www.eec.org.au/policy-advocacy/overview#/submissions>>.

42 Department of Finance, *National Strategy on Energy Efficiency* (2010) <https://www.finance.wa.gov.au/cms/Public_Utility_Office/Energy_Initiatives/National_Strategy_on_Energy_Efficiency.aspx>.

43 See International Energy Agency (IEA), *Summing Up the Parts: Combining Policy Instruments for Least-Cost Climate Mitigation Strategies* (2011) <http://www.iea.org/papers/2011/Summing_Up.pdf>; International Energy Agency (IEA), *Combining Policy Instruments for Least-Cost Climate Mitigation Strategies* (2010); Australian Government Productivity Commission, above n 27.

44 E Woerdman, M Roggenkamp, and M Holwerda (eds), *Essential EU Climate Law* (Edward Elgar, 2015) 178.

2.4.1 Direct fiscal incentives

Direct fiscal incentives in various forms can play an important role. Studies in the European Union⁴⁵ suggest that increasing energy taxes 'can provide benefits that exceed the costs by a relatively wide margin and energy taxation thus appears to be a cost-effective way of improving energy-efficiency in the economy'.⁴⁶ Energy efficiency subsidies may also generate energy savings exceeding that of energy taxation and in some cases, substantially.

Incentives can also be used as a mechanism to encourage electricity consumers to reduce their consumption at times of peak demand, something that is crucial given that as peak demand increases, power generators have an incentive to expand the grid and the amount of electricity generated, with a commensurate increase in carbon emissions. If instead the load can be spread, such increased generation capacity can be avoided. Here the most obvious mechanism to encourage consumption in off-peak periods is differential pricing of electricity ('time of use' pricing) in conjunction with information about the savings available from running appliances at non-peak times plus 'smart meters' that enable consumers to receive information about their energy use and cost in 'real time'. Accompanying such measures with the provision of 'smart technology' such as appliances (dishwashers, washing machines, hot water heaters etc) capable of being programmed remotely to function at non-peak times can also realise considerable energy savings.

2.4.2 Informational regulation

Informational regulation involves the state encouraging or requiring the provision of information about energy impacts, but *without* directly requiring a change in those practices. This approach relies upon incentives and public opinion as the mechanisms to bring about improved energy performance. In terms of carbon policy, its most important manifestation is product labelling and certification with regard to energy performance, an approach that has been adopted in numerous countries, in part because of the relative ease of measuring energy and quantifying benefits and costs. Such initiatives may involve endorsement or warning labels, or may provide consumers with comparative information with regard to energy consumption, cost and attributes of a product – popularly termed 'eco-labelling'.

There is considerable literature documenting the outcomes achieved by this type of informational regulation.⁴⁷ It is clear from various studies that many schemes have a readily discernible effect in the aggregate.⁴⁸ For example, in Europe, consumers both understand and make use of the labels; and a substantial proportion of total consumer purchases appear to be influenced by the information provided.⁴⁹ In light of the low costs involved in establishing and maintaining such a scheme, eco-labelling appears to be a very cost-effective policy option.

However, there are limitations on the efficacy of this type of informational regulation. Most fundamentally, the success of labelling initiatives depends on consumer preference for more energy-efficient products. This appears to be determined not just by prevailing community attitudes towards environmental issues, but also by economic conditions and some products will lend themselves more readily to labelling than others.⁵⁰ For example, washing machines may be more amenable to this form of regulation than light bulbs. Light bulb purchases are low-involvement, impulse purchases and the energy efficiency of the product was inextricable from other valued product attributes, such as the aesthetic quality of the light produced.⁵¹

45 BIO Intelligence Service, *A Study on the Costs and Benefits Associated with the Use of Tax Incentives to Promote the Manufacturing of More and Better Energy-efficient Appliances and Equipment and the Consumer Purchasing of these Products* (2008) <http://ec.europa.eu/taxation_customs/resources/documents/taxation/gen_info/economic_analysis/economic_studies/summary_costs_benefits_bio_en.pdf>.

46 K Kosonen and G Nicodeme, *The Role of Fiscal Instruments in Environmental Policy*, Directorate-General for Taxation and Customs Union (European Commission Working Paper, Luxembourg, 2009) 29 <http://ec.europa.eu/taxation_customs/resources/documents/taxation/gen_info/economic_analysis/tax_papers/taxation_paper_19.pdf>.

47 G Gallastegui, 'The Use of Eco-Labels: A Review of The Literature' (2002) 12 *European Environment* 316.

48 European literature summarised by K Sammer and R Wuestenhagen, 'The Influence of Eco-Labeling on Consumer Behaviour: Results of a Discrete Choice Analysis for Washing Machines' (2006) 15(3) *Business Strategy and the Environment* 185.

49 J Winward, P Schiellerup and B Boardman, *Cool Labels - The First Three Years of the European Energy Label* (Environmental Change Unit, University of Oxford, 1998).

50 Sammer and Wuestenhagen, above n 49.

51 Ibid.

2.4.3 Direct regulation

While in many circumstances energy efficiency can be facilitated or incentivised by relatively non-intrusive mechanisms, there nevertheless remains a sub-category of situations where other types of instruments (usually direct regulation) may be more appropriate. In particular, this is the case with regards to energy efficiency in buildings. There can be no doubt that improving energy efficiency at the time of construction will provide substantial energy savings, but it is extraordinarily difficult to provide builders with incentives (in the absence of mandatory energy efficiency standards) to build more energy efficient housing or commercial buildings. This is because, although this would be cost effective over the lifetime of the building, such measures will add to the construction price and provide no comparable benefit to the builder (it being subsequent owners/renters who would benefit from such energy efficiency measures). Mandatory minimum energy efficiency standards in buildings (commercial and domestic) are the most obvious means of overcoming this problem.⁵² There are equally strong arguments in favour of minimum performance standards for appliances.⁵³

2.4.4 Other energy efficiency initiatives

A number of other energy efficiency strategies also remain in place. For example, the Commonwealth, in conjunction with the states and territories, has continued to implement national Minimum Energy Performance Standards (MEPS) to achieve emissions reductions in circumstances where a price signal alone is unlikely to be effective, including energy rating labelling requirements for a wide range of products and equipment. For example, it is illegal to sell certain types of air conditioners unless they meet national MEPS. Certain informational tools, such as energy rating labels to increase awareness of the benefits of energy efficient appliances, also continue to operate.

At a state level, there are also a variety of energy efficiency programs, although some jurisdictions have been much more active than others.⁵⁴

2.5 The role of innovative statutory entities

An innovation in terms of economic incentives policy, is the creation of a government-supported statutory entity to leverage private finance for energy efficient and low-carbon solutions. In 2013, the Clean Energy Finance Corporation (CEFC), which operates under the *Clean Energy Finance Corporation Act 2012* (Cth) section 8(1), commenced the funding of projects that use a commercial approach to overcome market barriers and mobilise investment in renewable energy, energy efficiency and low emissions technologies. Its mission is 'to accelerate Australia's transformation towards a more competitive economy in a carbon constrained world, by acting as a catalyst to increase private sector investment in emissions reduction'.⁵⁵ Industry players have identified its 'strong potential to play an important role' given its certain source of funding and lower rate of return than other financial lenders.⁵⁶

Another innovative example of an Australian statutory entity is the Australian Renewable Energy Agency (ARENA),

52 J Van der Heijden, *Governance for Urban Sustainability and Resilience: Responding to Climate Change and the Relevance of the Built Environment* (Edward Elgar, 2014); J Van der Heijden, 'Regulatory Failures, Split-Incentives, Conflicting Interests and a Vicious Circle of Blame: The New Environmental Governance to the Rescue?' (2015) 58 *Journal of Environmental Planning and Management* 6, 1034. See also International Energy Agency (IEA), *Modernising Building Energy Codes* (United Nations Development Programme, 2013). In terms of Australian standards see in particular the National Construction Code, which imposes residential minimum energy efficiency standards for new buildings, although these are widely breached. Minimum energy efficiency standards for new residential buildings are also imposed in most states and territories.

53 Minimum energy performance standards have been in place since 1999 with regard to refrigerators, air conditioning and certain other appliances. More recently, the *Greenhouse and Energy Minimum Standards Act 2012* (Cth) established nationally consistent standards for appliances more broadly.

54 Government of South Australia, *South Australia Strategic Plan* (Department of the Premier and Cabinet (SA), 2011) <<https://www.sa.gov.au/topics/water-energy-and-environment/energy/government-energy-efficiency-initiatives>>.

55 Clean Energy Finance Corporation (CEFC), *Annual Report 2013-2014* (2014) <<http://www.cleanenergyfinancecorp.com.au/reports/annual-reports/files/annual-report-2013-14.aspx>>.

56 Baker & McKenzie, 'Client Alert: Structure and approach of the Clean Energy Finance Corporation' (Client Alert, Baker & McKenzie, 2012).

which was established to make renewable energy solutions more affordable (for example, the provision of grants) and thereby increase the amount of renewable energy used in Australia. It has currently committed over AU\$1 billion to more than 200 projects.⁵⁷

Both of these entities have considerable potential for effectiveness, efficiency, and also equitable access to markets. However, both are under threat of abolition, or at the very least, of much diminished roles, notwithstanding their commercial success and future potential.⁵⁸ While the federal government was unsuccessful in securing the passage of the *Australian Renewable Energy Agency (Repeal) Bill* into law in 2014, it remains hostile to the organisation's existence and role, as it does to that of the CEFC.

⁵⁷ Department of Industry and Science (Cth), above n 32, 58.

⁵⁸ Ibid.

3. Recommendations

In terms of its capacity to shift the nation towards a low-carbon economy, Australia's energy regime is seriously inadequate. Notably absent are credible economic incentives such as pricing carbon, and a coherent energy efficiency policy. Instead, there is the government's flagship policy, Direct Action, which is unlikely to prove effective, efficient or equitable. Australia also lacks measures to limit fossil fuel extraction to a fair contribution to meet the global carbon budget to limit mean global temperature rises to for 2° C or 1.5° C. It also lacks recognition in policy goals that stabilising mean global temperature rises at 2° C or 1.5° C accepts the risk of severe impacts on iconic ecosystems such as the Great Barrier Reef.⁵⁹

Against this backdrop, what approach is most likely to lead to a transition to a low-carbon economy, consistent with the IEA's exhortations? To this end, APEEL recommends seven key policy tools and two over-arching considerations that should guide policy design. The seven policy tools are: (1) carbon price; (2) incentivise renewable energy and low-carbon initiatives; (3) reinstate a robust and certain Renewable Energy Target (RET); (4) support the Clean Energy Finance Corporation (CEFC); (5) facilitate energy efficiency; (6) remove fossil fuel subsidies; and (7) a supply side measure to limit fossil fuel extraction to meet Australia's fair contribution to meeting the global carbon cycle. The two policy design guidelines are: (a) use complementary combinations of policy tools; and (b) provide policy stability for increased investment.

3.1 Key policy tools for a low-carbon transition

3.1.1 Impose a price on carbon

Imposing a price on carbon (whether through a payment for damage caused - misleadingly, but widely referred to as a tax - or a trading or hybrid mechanism) has considerable advantages and should be central to any regulatory reform.⁶⁰ Pricing carbon penalises GHG-intensive corporations and projects and internalises the cost of carbon emissions consistent with the polluter pays principle and in a cost-effective manner.⁶¹ It does so through disincentivising mid-to-long term financial support for carbon-intense sectors; and by incentivising engagement with renewable and clean technology companies and investments, encouraging a shift towards existing low-carbon fuels and technologies and incentivising the development of new ones, while also encouraging energy efficiency. It is also the case that the use of such a market mechanism, if carefully designed and underpinned by a sufficiently strong political constituency as to resist emasculation, would be a flexible and efficient means of delivering agreed carbon reductions. If coupled with appropriate compensating mechanisms for the most disadvantaged (for example, disadvantaged consumers who would otherwise pay higher electricity prices) it would also be equitable. Notwithstanding some advantages in principle, a payment for damage caused (widely, but erroneously stigmatised as a 'carbon tax') is generally considered to be politically toxic in the Australian context and a hybrid would likely suffer the same fate, leaving the only credible option as an emissions trading scheme. Pragmatists might consider time is better spent ensuring that such a scheme is carefully crafted as well as learning from the mistakes of similar initiatives in other jurisdictions, rather than canvassing the merits of 'taxes' or hybrids.

⁵⁹ See Australian Panel of Experts on Environmental Law, *Marine and Coastal Issues* (Technical Paper 4, 2017) for the impact climate change is having on the marine and coastal environments; see Australian Panel of Experts on Environmental Law, *Climate Law* (Technical Paper 5, 2017) for more on the *Paris Agreement's* long-term temperature goal.

⁶⁰ See Australian Panel of Experts on Environmental Law, *The Private Sector, Business Law and Environmental Performance* (Technical Paper 7, 2017) for more on carbon and other pricing mechanisms.

⁶¹ See L Xynas, 'Climate Change Mitigation: Carbon Tax - is it the Better Answer for Australia' (2011) 26 *Australian Tax Forum* 339; W Gumley and N Stoianoff, 'Carbon Pricing Options for a Post-Kyoto Response to Climate Change in Australia' (2011) 39 *Federal Law Review* 131; F Jotzo, 'Australia's Carbon Price' (2012) 2 *Nature Climate Change* 475; F Jotzo, 'Keep Australia's Carbon Pricing' (2013) 505 *Nature* 38; S Waddell, 'By How Much Will a 'Price on Carbon' Actually Lower Australia's Emissions? Towards Climate Accountability for Greenhouse Gas Emissions Abatement' (2013) 16 *Australasian Journal of Natural Resources Law and Policy* 1. See also Australian Government Productivity Commission, above n 27.

3.1.2 Introduce or reinforce renewable energy and low-carbon incentives

The virtues of pricing carbon has led some economists to argue that, if appropriately designed, this mechanism can achieve a transformation to a low-carbon economy without the need for other mechanisms intended to achieve the same goal.⁶² For example, in the Australian context, Garnaut, in his influential contribution to the energy policy debate, has asserted that ‘no useful purpose is served by other policies that have as their rationale the reduction of emissions from sectors covered by the trading scheme. The Mandatory Renewable Energy Target should be phased out’.⁶³

However, whatever the merits in theory, it would be unwise to adopt such a monocular approach in the messy world of energy policy as it is actually practised. In particular, taxes or trading schemes are *not* sufficient in and of themselves to achieve a transformation of the energy sector in the constrained time period which the science suggests remains available for effective mitigation.⁶⁴ There are a number of reasons why this is the case. Some of these relate to limitations in the design of particular schemes while others concern the inherent limitations of such incentive-based mechanisms. As regards the former, the prices generated by carbon markets may be too low (or insufficiently stable) to send effective signals to major carbon emitters to shift to lower emitting technologies. Moreover, the incentives provided by carbon markets may be ‘fuzzy’ - involving such market imperfections as monitoring, enforcement and asymmetric information problems, all of which may constrain some emitters from responding to price signals or worse, may generate fraud, speculation or rent seeking.⁶⁵

But beyond the above imperfections lie other limitations which are more fundamental. In particular, as the Organisation for Economic Co-operation and Development (OECD) points out, ‘carbon pricing does not address the large market failures undermining R&D [research and development] in climate mitigation, such as incompatibility with existing infrastructure’.⁶⁶ Nor will market mechanisms, such as emissions trading, be sufficient to encourage and facilitate the investment, development and dissemination of low-carbon technologies within the relatively short time frame available.⁶⁷

For all the above reasons, additional policies to incentivise investment in and uptake of renewables, clean technology and energy storage technology by private actors are also required.⁶⁸ Such policies may take the form of hard economic incentives such as tax credits, and/or grants or FITs, but only where these do not conflict with other policy instruments and not where they are demonstrably cost-inefficient. They might also take the form of complimentary ‘soft’ behavioural and cognitive incentives such as mandatory disclosure of material climate risks of listed investment; or other informational regulation that facilitates company rankings regarding GHG emissions reductions. These types of regulation are low interventionist and often politically palatable.

62 For example: ‘cap and trade schemes should provide assurance of meeting an overall emissions target at least cost. It follows that, if we assume a perfect economy with no market failures, any instruments which directly or indirectly interact with a carbon ETS will raise overall abatement costs while providing no additional contribution to emission reductions’: S Sorrell and J Sijm, ‘Carbon Trading in the Policy Mix’ (2003) 19 *Oxford Review of Economic Policy* 3, 420, 434; see Australian Panel of Experts on Environmental Law, *The Private Sector, Business Law and Environmental Performance* (Technical Paper 7, 2017) for more information on the use of the tax system as a potential tool for incentivising improvements to environmental performance.

63 R Garnaut, *Garnaut Climate Change Review* (Cambridge University Press, 2008) xxxii; R Garnaut, *Update Paper 6: Carbon Pricing and Reducing Australia’s Emissions*, (Update Paper, Garnaut Climate Change Review, 2011).

64 See for example, United States Government Accountability Office, *Testimony before the Subcommittee on Energy and Environment, Committee on Energy and Commerce, House of Representatives: Observations on the Potential Role of Carbon Offsets in Climate Change Legislation* (Statement of John Stephenson, Director Natural Resources and Environment, Washington DC, March 5, 2009) <<http://www.gao.gov/new.items/d09456t.pdf>>; this is not to deny the importance of energy taxes or to suggest that they do not play an important role, but rather that they are necessary, but not sufficient to mitigate climate change.

65 *The Economics of Climate Change Mitigation* (Report, OECD, 2009) 20-21. See also N Sachs, ‘Greening Demand: Energy Consumption and US Climate Policy’ (2009) 19 *Duke Environmental Law and Policy Forum* 295, 295-320; Sachs argues that barriers to effective market signals include principal-agent divergence of interests, high implicit discount rates used in purchase of energy-using products, inadequate information on energy pricing and usage by individuals and lack of incentives for utilities to undertake investments in efficiency measures.

66 *The Economics of Climate Change Mitigation*, above n 66, 20-21.

67 Ibid; see also R Sims, *Can Energy Technologies Provide Energy Security and Climate Change Mitigation?* (NATO Science for Peace and Security Series C: Environmental Security, Springer, 2009) ch 4.

68 M Bowman, *Banking on Climate Change: How Finance Actors and Transnational Regulatory Regimes are Responding* (Kluwer Law International, 2014) ch 6; see also Australian Panel of Experts on Environmental Law, *The Private Sector, Business Law and Environmental Performance* (Technical Paper 7, 2017).

3.1.3 Reinstate a robust and certain Renewable Energy Target (RET)

The RET has substantially facilitated the shift towards a low-carbon economy in Australia⁶⁹ and is an essential element of a low-carbon emissions strategy. Yet since its inception in 2001, the RET has undergone several changes, which has created uncertainty for investors. The clarity finally achieved in 2009 (with the decision that 20% of Australia's electricity supply must come from renewable sources by 2020) gave investors the necessary confidence to support the growth of the renewables sector.⁷⁰ For these reasons, investor groups recommended in 2012 that the government leave the RET scheme unaltered until 2030 in order to safeguard renewable energy investment plans, both current and future.⁷¹ The federal government's decision to downgrade that target has once again created uncertainty concerning the future of the RET, threatening Australia's capacity to attract renewable energy investment and the sector's future development. A higher target should be re-introduced and locked in for the medium to long term.⁷²

3.1.4 Maintain or extend the role of the Clean Energy Finance Corporation (CEFC)

By 30 June 2014, the CEFC had successfully built a diversified portfolio of AU\$931 million and realised total project value of over AU\$3.2 billion by leveraging other funds at more than \$2.20 for every dollar of its own investment. The Corporation states that these investments, once constructed and operational, will contribute to over 4.2 million tonnes of carbon dioxide equivalent abated annually and at a negative cost (positive return) of \$2.40 per tonne.⁷³ Whilst there is certainly room for a higher leverage ratio,⁷⁴ the Corporation is fulfilling a valuable role in facilitating investment in renewable energy and energy efficiency.

3.1.5 Facilitate energy efficiency and storage capacity

Energy efficiency is in many ways the most attractive pillar of the energy policy mix, offering more 'low hanging fruit' and opportunities for win-win or low cost outcomes, notwithstanding that there remain obstacles to realising some of these opportunities. Direct fiscal incentives (energy taxes and energy efficiency subsidies and tax breaks) and incentives for load spreading (from peak to off-peak consumption via 'time of use' pricing) both have value in improving energy efficiency. So too do various forms of informational regulation from mandated product labelling and certification with regard to energy performance, which could sensibly be modelled on the mandatory EU Energy Label, which has resulted in substantial increases in the purchase of energy efficient products and in the development of such products to meet growing market demand. There also remains an important role for direct regulation, as for example, with regard to energy efficiency in buildings where there are opportunities for major energy efficiency gains, but builders lack incentives to realise them.

Importantly, smart grids and energy storage play a particular role in supporting renewable energy whose input to the grid is highly variable and unpredictable. They do so via their contribution to distribution automation and demand response, smart metering, more advanced forecasting technologies and in the longer term, distributed storage mechanisms and the development of micro-grids.⁷⁵ Indeed, developments in storage technology will be a game changer. If solar and/or wind power can be economically stored then it can be released on command, which remedies the issue of on-demand electricity supply despite inconsistent generation (when the wind is not blowing and the sun is not shining) and thus puts renewable energy at parity with traditional sources. There is a serious possibility

69 For a comparison with other G 20 countries see *Fact Check: How Does Australia's Renewable Energy Target Compare With What Other G20 Countries Are Doing?* 2014, The Climate Institute, <http://www.climateinstitute.org.au/verve/_resources/TCI_HowDoesOurRETCompareToG20_Factcheck_September2014.pdf>.

70 Investor Group on Climate Change (IGCC), *IGCC submission to Review of the Renewable Energy Target Scheme*, (IGCC, 2012).

71 Ibid.

72 See Australian Panel of Experts on Environmental Law, *The Private Sector, Business Law and Environmental Performance* (Technical Paper 7, 2017) for more on incentives to adopt renewable technologies.

73 Clean Energy Finance Corporation (CEFC), *Chair's Report: 2013-2014 Annual Report* (2014) <<http://www.cleanenergyfinancecorp.com.au/reports/annual-reports/files/annual-report-2013-14.aspx>>.

74 For example, the UK's equivalent Green Investment Bank has a 3:1 ratio; and the World Bank's Clean Technology Fund has an 8:1 leverage ratio. See respectively, Green Investment Bank, *Summary of Transactions*, <http://www.greeninvestmentbank.com/media/25380/gib_ar_transactions_250714.pdf>; and, World Economic Forum, *The Green Investment Report: The Ways and Means to Unlock Private Finance for Green Growth* (World Economic Forum, 2013) 21.

75 International Renewable Energy Agency (IRENA), *Smart Grids and Renewables: A Guide for Effective Deployment*, (November 2013) <https://www.irena.org/DocumentDownloads/Publications/smart_grids.pdf>.

that innovations such as Tesla's lithium ion and lithium air battery systems, which store solar power during the day for use at night, will bring cost-effective domestic scale storage within ten years.⁷⁶ Grid-level storage (installed by utilities) is currently being piloted with an estimated roll-out of two to three decades.⁷⁷ According to a 2015 Climate Council report, Australia will likely be one of the biggest markets for battery storage due to its high cost of electricity and the large number of households installing solar panels.⁷⁸ Indeed, the potential value of this market in Australia alone has been estimated by Morgan Stanley at \$24billion.⁷⁹ Regulation that incentivises investment in and research and development for these technologies can expedite their roll-out at scale and put Australia in a global leadership position.

3.1.6 Remove fossil fuel subsidies

Although there is a clear need to augment alternative energy markets, Australian federal policy support for fossil fuels is high, dwarfing the expenditure on programs that support renewable energy. For example, a 2014 Australian Conservation Foundation report estimated that these subsidies would amount to some \$47 billion over the next four years,⁸⁰ with the Fuel Tax Credit scheme accounting for \$27.9 billion of this sum. Indeed, even as new technologies approach parity with fossil fuels, they remain unable to compete effectively with them due to hidden, but substantial fossil fuel subsidies and power generation arrangements that are structured to support fossil fuels and tend to lock out renewable energy technologies.⁸¹

While subsidies can be effective in achieving policy goals (for example, increasing use of and investment in a new energy source) they are notoriously inefficient as they usually cost far more than the benefits they deliver and are also a drain on public revenue.⁸² Fossil fuel subsidies create particular policy distortions by rewarding investment in high emission activities and carbon-intensive projects in Australia, which in turn inhibits growth in the renewable energy and clean technology markets. Indeed, without substantial government support for the fossil fuel industry, and coal in particular, a growing number of new ventures would be economically unviable and would not proceed. A controversial example is that of Adani's proposed Carmichael mine in the Galilee Basin.⁸³

Fossil fuel subsidies also increase demand for fossil fuels by keeping prices artificially low and in so doing, encourage more carbon emissions. Accordingly, removing such subsidies is crucial. Doing so would enhance energy security, reduce GHG emissions and air pollution *and* bring economic benefits.⁸⁴ Moreover, the fall in the price of oil and gas provides a once-in-a-generation opportunity for politicians to remove these subsidies and to 'fix bad energy policies' relatively painlessly.⁸⁵

76 See generally TESLA, *Powerwall* (2015) <<https://www.teslamotors.com/POWERWALL>>; and, A Young, 'Lithium Air Battery Breakthrough Could Lead to Replacement of Lithium Ion Batteries', *International Business Times* (online), 1 November 2015 <<http://www.ibtimes.com/lithium-air-battery-breakthrough-could-lead-replacement-lithium-ion-batteries-2164268>>.

77 However, there are challenges here. It is the network providers that are part of this trialling of storage options. This is changing their role from transmission into the generation space. This is currently problematic from the point of view of the overall legislative structure of the market. It makes them a competitor to current generation businesses which is prohibited by legislation. Encouragement of storage for the purposes of reducing emissions needs to be carefully thought through. Some transmission businesses are working with government in this space to ensure its current compliance with legislation. However, in the long-term there may well need to be significant legislative change as storage technologies improve.

78 Climate Council, *Powerful Potential: Battery Storage for Renewable Energy and Electric Cars* (2015) <<https://www.climatecouncil.org.au/uploads/ebdfcdf89a6ce85c4c19a5f6a78989d7.pdf>>.

79 RenewEconomy, *Morgan Stanley Sees 2.4m Australia Homes with Battery Storage* (2015) <<http://reneweconomy.com.au/2015/morgan-stanley-sees-2-4m-australia-homes-with-battery-storage-20668>>. McKinsey has estimated that the 'economic impact' or value of energy storage globally could be between \$90 - \$635 billion a year by 2025 (depending on how fast it is applied to cars): McKinsey Global Institute, *Disruptive Technologies: Advances that Will Transform Life, Business, and the Global Economy* (2013) <http://www.mckinsey.com/insights/business_technology/disruptive_technologies>.

80 Australian Conservation Foundation, *Fossil Fuel Subsidies* <<http://www.acfonline.org.au/be-informed/climate-change/fossil-fuel-subsidies>>. Internationally, rich western countries and the world's leading developing nations are spending up to US \$200bn a year providing such perverse incentives, which not only distort costs and prices: OECD, 'OECD Companion to the Inventory of Support Measures for Fossil Fuels 2015' (OECD, September 2015) <<http://www.oecd.org/environment/oecd-companion-to-the-inventory-of-support-measures-for-fossil-fuels-2015-9789264239616-en.htm>>.

81 See H T Anker, B E Olsen and A Rønne (eds), *Legal Systems and Wind Energy: A Comparative Perspective* (Kluwer Law International, 2009); see also E Woerdman, M Roggenkamp, and M Holwerda, above n 45, ch 6.

82 There may be exceptions, as with 'merit goods and services' which are said to generate positive externalities (increased social benefits). For example, a subsidy of embryonic renewable energy technologies. Examples might be justified both because that technology cannot gain ready access to existing energy networks, and provides a public benefit in terms of clean (low carbon) energy.

83 See for example, S Small, 'Old Treasury Repeatedly Warned Against Carmichael Coal Mine, Documents Reveal' *ABC News* (1 July 2015) <<http://www.abc.net.au/pm/content/2015/s4265585.htm>>.

84 International Energy Agency, above n 44, 13.

85 The Economist, 'Seize the Day', *The Economist* (online), 17 January 2015 <<http://www.economist.com/news/leaders/21639501-fall-price-oil-and-gas-provides-once-generation-opportunity-fix-bad>>.

Unfortunately, Malcolm Turnbull, notwithstanding pressure from the large majority of developed nations, has refused to commit Australia to any reduction of fossil fuel subsidies, notwithstanding pressure to do so during the lead up to the *Paris Agreement*.⁸⁶

3.1.7 Supply side measures to limit fossil fuel extraction to discharge Australia's fair contribution to meeting the global carbon budget

In the absence of substantial deployment of carbon capture and storage, the remaining carbon budget to limit mean global temperature rises to 2° C requires 35% of global oil reserves, 52% of global gas reserves and 88% of global coal reserves to remain unburnt.⁸⁷ Allocating this carbon budget across regions may require 95% of remaining Australian coal reserves to remain unburnt.⁸⁸ Further research is required to determine, for instance, whether current approved coal extraction already exceeds 5% of remaining Australian reserves. It appears highly likely that this is the case for both a carbon budget to limit mean global temperature rises to 2° C or 1.5° C. If this is correct, the logical consequence is that a moratorium on new coal mines is required, including mines exporting coal.

While GHG emissions from burning Australian oil, gas and coal that is exported are not counted as Australian emissions under the accounting framework established under the *United Nations Framework Convention on Climate Change (UNFCCC)*, the location of emissions makes no difference to their impact on the atmosphere and climate systems. Australia controls a major part of the globe's supply of fossil fuels, particularly of coal, and, therefore, Australia is in a position to effect supply side controls that have a global significance. More broadly, extraction of all fossil fuels, including for exports, should be limited to Australia's fair contribution to meeting the global carbon budget to limit mean global temperature rises to levels required to protect iconic ecosystems such as the Great Barrier Reef.

3.2 Policy Design Guidelines

3.2.1 Develop complementary combinations of policy tools

There is considerable evidence that complementary combinations of policy instruments are likely to work better than stand-alone tools.⁸⁹ For example, consumers may have insufficient information about the energy-saving capacity of a particular appliance, in which case informational regulation via energy labelling may usefully complement tax instruments which reduce the cost of such appliances. Similarly, a 2015 International Renewable Energy Agency study found that when energy efficiency and renewable energy potentials are combined, total global energy demand can be reduced by 25% by 2030.⁹⁰ However, it is equally the case that some instrument combinations can be counterproductive. For example, previous Australian state and territory FITs that overlapped with a RET did not lead to any additional abatement, added to the total financial cost of meeting the target, and 'could have actually led to higher emissions than if there had been no FIT schemes'.⁹¹ Accordingly, in designing energy regulation, it is imperative to be mindful of the overall policy package and to ensure its internal coherence.

86 See for example, T Arup, 'Paris UN Climate Conference 2015: Australia Rejects Fossil Fuel Pledge' *Sydney Morning Herald* (online), 1 December 2015 <<http://www.smh.com.au/environment/un-climate-conference/paris-un-climate-conference-2015-australia-rejects-fossil-fuel-pledge-20151130-glbw4s.html>>.

87 C McGlade and P Ekins, 'The Geographical Distribution of Fossil Fuels Unused When Limiting Global Warming to 2° Degrees' (2015) *Nature* 517, (7533) 187-190, Table 1, 189.

88 Ibid.

89 N Gunningham, P N Grabosky, and D Sinclair, *Smart Regulation: Designing Environmental Policy* (Clarendon Press, 1998) ch 6; D Buchan, *Expanding the European Dimension in Energy Policy: The Commission's Latest Initiatives* (Oxford Institute for Energy Studies, 2011) <http://www.oxfordenergy.org/wpcms/wp-content/uploads/2011/10/SP_23.pdf>.

90 International Renewable Energy Agency (IRENA), *Synergies Between Renewable Energy and Energy Efficiency a Working Paper Based on Remap 2030* (August 2015); International Renewable Energy Agency (IRENA) *Energy Efficiency Vital To Doubling Global Share Of Renewables* (2015) <<http://irenanewsroom.Org/2015/08/11/Energy-Efficiency-Vital-To-Doubling-Global-Share-Of-Renewables/>>.

91 Australian Government Productivity Commission, above n 27, 83.

3.2.2 Promote policy stability to encourage further investment in renewables

The *Energy White Paper* states that it is desirable to give ‘industry and consumers certainty in energy policy’;⁹² yet government policy has produced quite the contrary effect. The climate policy framework implemented in Australia in 2011 included a carbon price, a RET, compulsory reporting of intensive corporate GHG emissions, and the CEFC. That regime was recommended by experts to investor networks around the world as ‘investment grade’ and apt to provide ‘investors with real confidence when investing in areas such as renewable energy’.⁹³ However, in less than three years, the legal and regulatory landscape was altered radically. As noted by Deutsche Bank, ‘as investors, we essentially look for transparency, longevity and certainty (TLC) in assessing the potential success of policies’.⁹⁴ The current federal government’s approach scores poorly on all of the Bank’s criteria, but is particularly weak in terms of the last two. As a result, investor enthusiasm has shifted elsewhere, notwithstanding Australia’s natural abundance of renewable energy sources. Restoring a stable and incentivising investment environment for the long term is essential. As the National Committee on Fuels and Energy pointed out in 2012: ‘The transition to a low CO₂ emission economy ... will be driven by long-term investment decisions. ... Australian policy and market consistency will be a critical determinant of the capacity for Australia to access [international capital] investment funds, and the cost of those funds’.⁹⁵

⁹² Department of Industry and Science (Cth), above n 32, 64.

⁹³ R Sullivan, *Investment-Grade Climate Change Policy: Financing the Transition to the Low-Carbon Economy* (Institutional Investor Group on Climate Change, the Investor Network on Climate Risk, the Investor Group on Climate Change Australia/New Zealand and the United Nations Environment Programme Finance Initiative, 2011) 15.

⁹⁴ Deutsche Bank, *Investing in Climate Change 2010: A Strategic Asset Allocation Perspective* (Deutsche Bank, 2010) 10.

⁹⁵ National Committee on Fuels and Energy, *Discussion Paper on Australia’s Energy Options and Strategies* (Issues Paper on Australia’s Energy Options and Strategies Executive Summary, National Committee on Fuels and Energy, 2012) 1.

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The Australian Panel of Experts
on Environmental Law

THE PRIVATE SECTOR, BUSINESS LAW AND ENVIRONMENTAL PERFORMANCE

TECHNICAL PAPER 7

APEEL



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The principal contributions to this
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About APEEL

The Australian Panel of Experts on Environmental Law (APEEL) is comprised of experts with extensive knowledge of, and experience in, environmental law. Its membership includes environmental law practitioners, academics with international standing and a retired judge of the Federal Court. APEEL has developed a blueprint for the next generation of Australian environmental laws with the aim of ensuring a healthy, functioning and resilient environment for generations to come. APEEL's proposals are for environmental laws that are as transparent, efficient, effective and participatory as possible. A series of technical discussion papers focus on the following themes:

1. The foundations of environmental law
2. Environmental governance
3. Terrestrial biodiversity conservation and natural resources management
4. Marine and coastal issues
5. Climate law
6. Energy regulation
7. The private sector, business law and environmental performance
8. Democracy and the environment

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Summary and Recommendations

Executive Summary

This *Technical Paper* considers the role of the private sector (namely business and industry) in environmental protection and management, and the effect of business law on the private sector's environmental performance. Because the philosophy of ecologically sustainable development is not well integrated into Australia's economic governance, the business sector encounters ambiguous messages about how environmental considerations should inform its decisions such as financial investing or tax planning. The long-held assumption that environmental standards and rules are best 'quarantined' to within specific environmental legislation is problematic. This paper identifies key challenges and assesses how environmental principles and standards can be integrated into Commonwealth laws relating to corporations, financial investment, tax, consumer protection and trade. The paper also considers the contribution of voluntary environmental initiatives, known as corporate social responsibility of socially responsible investment. Recommendations for law reform to facilitate private sector collaboration, innovation and leadership in environmental responsibilities are canvassed.

Specific recommendations include:

- 7.1. *A general duty on all companies to improve their environmental performance.*
- 7.2. *Require companies to develop environmental management systems, sustainability plans, improved environmental reporting and processes for consultation with stakeholders. Company law should be reformed to establish an environmental judgement rule, collect and disclose environmental performance data, and reward shareholders with weighted voting rights.*
- 7.3. *Redefine the fiduciary and trust law responsibilities of financial institutions to require environmentally responsible investment.*
- 7.4. *Oblige the Commonwealth's Future Fund to promote environmentally responsible investment.*
- 7.5. *Develop positive environmental disclosure obligations on business.*
- 7.6. *Allow for the establishment of corporate 'hybrid' enterprises that blend profit maximisation and community benefit goals.*
- 7.7. *Reform the tax system to improve the financial advantages of environmentally responsible practices.*
- 7.8. *Explore new sources of finance such as goods and services tax (GST) revenue to support and incentivise environmental innovation and stewardship.*
- 7.9. *Give effect to the United Nations Guiding Principles on Business and Human Rights.*

HOW TO CONTRIBUTE TO THE APEEL PROJECT

APEEL invites you to provide your responses to the ideas and recommendations presented in this paper. This will assist the development of our final proposals for the next generation of Australian environmental laws.

We look forward to your engagement on specific reform options as the APEEL journey progresses.

Please send your responses to: admin@apeel.org.au or go to www.apeel.org.au where you can do so online.

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1. The challenges

APEEL recognises that environmental law is not the only part of a legal system that influences environmental behaviour.¹ A wide variety of other laws, many of which ostensibly have nothing to do with the natural environment, are highly relevant. Business law, in particular, has significant environmental ramifications because it directly influences many economic activities.² Business law also has consequences for human rights and democracy because of the often privileged position of the business community in national policy-making in areas such as tax, trade and the environment itself. To ensure their interactions are productive rather than antagonistic, an understanding is required as to how business laws interact with environmental law.³ The business sector is potentially a significant source of financial support for meeting the costs of environmental protection and improvement. However, because the philosophy of ecologically sustainable development (ESD) is not deeply embedded in Australia's economic governance, the business sector sometimes faces unclear or inconsistent messages about the role that environmental considerations should play in its decisions such as financial investing or tax planning.

The areas of business law of most significance to these issues are: corporate law (which influences the goals of business enterprises and to whom they are accountable); financial investing regulation, including laws governing superannuation funds and other financial entities (affecting the scope for socially responsible financing); consumer law (controlling advertising about the environmental qualities of services and products); trade law (trade agreements influence economic activity and environmental standards); and taxation law (providing incentives or disincentives for environmentally responsible behaviour).

Legal reforms yet untried in Australia offer the potential to create a more environmentally responsible commercial climate. These reforms include new corporate models, currently operating in North America and the United Kingdom, known as benefit corporations or community interest companies. For financial investors, there are options to redefine fiduciary and trust law responsibilities to encourage long-term, sustainable investing. Corporate environmental reporting is another area of prospective legal reform that might help. Recent reviews of the Australian tax system highlight the scope to greatly improve tax concessions for private nature conservation and other environmental contributions.⁴ Introduction of positive environmental disclosure obligations on retailers might also promote more environmentally conscious consumer choices. There are probably many other opportunities that can be identified for pursuit through law reform.

Some members of the business sector already recognise the value of improving their environmental performance for reasons of their own financial self-interest, social reputation or relationships with community stakeholders, as evident in some companies taking actions beyond legal requirements.⁵ These efforts commonly involve internal management improvements such as purchasing standards, engineered or operations improvements, and voluntary codes and standards for industry sectors and investors.⁶ Some retail chains and brands are also voluntarily being more transparent to consumers about the environmental attributes of their products. The quality and impact of voluntary environmental initiatives in the business sector however is a matter of some debate, with concerns that voluntary approaches cannot be relied upon to foster meaningful or significant behavioural changes.⁷ Better support for some of these voluntary initiatives, and ensuring the integrity and transparency of their performance, are potentially important and efficient ways to improve environmental governance.

1 Australian Panel of Experts on Environmental Law, *The Foundations of Environmental Law: Goals, Objects, Principles and Norms* (Technical Paper 1, 2017).

2 Beate Sjafjell and Benjamin J Richardson (eds), *Company Law and Sustainability: Legal Barriers and Opportunities* (Cambridge University Press, 2015); Neil Gunningham and Darren Sinclair, *Leaders and Laggards: Next Generation Environmental Policy* (Greenleaf Publishing, 2002).

3 Andrew J Jordan and Andrea Lenschow (eds), *Innovation in Environmental Policy? Integrating the Environment for Sustainability* (Edward Elgar Publishing, 2008).

4 *Australia's Future Tax System Review* (Commonwealth of Australia, 2010) <https://taxreview.treasury.gov.au/content/Content.aspx?doc=html/pubs_reports.htm>.

5 Kathy Babiak and Sylvia Trendafilova, 'CSR and Environmental Responsibility: Motives and Pressures to Adopt Green Management Practices' (2011) 18 *Corporate Social Responsibility and Environmental Management* 1, 11.

6 Wayne Visser et al, *The A to Z of Corporate Social Responsibility: A Complete Reference Guide to Concepts, Codes and Organisations* (Wiley, 2007); Neil Gunningham, Robert A Kagan and Dorothy Thornton, 'Social License and Environmental Protection: Why Businesses Go Beyond Compliance' (2004) 29 *Law and Social Inquiry* 2, 307.

7 Jem Bendell, 'In Whose Name? The Accountability of Corporate Social Responsibility' (2005) 15 *Development in Practice* 3-4 362; Dexter Dunphy and Suzanne Benn (eds), *Corporate Governance and Sustainability: Challenges for Theory and Practice* (Routledge, 2007); Renard Siew, 'Style Over Substance: Sustainability Reporting Falling Short' *The Conversation* (23 September 2014).

This paper identifies and explains the relevance of business laws and practices of environmental significance. It identifies some key challenges and issues to address, and canvasses some principles to guide law reform, building on those identified in other APEEL *Technical Papers*. These challenges and issues include how might the law embed environmental performance standards into broader areas of economic life such as corporate governance; how can the law encourage environmental innovation and leadership in the private sector; and given the business sector's economic resources, how can corporations and investors help fund the next generation of Australian environmental laws? This paper examines some specific business laws of the Commonwealth, including financial, consumer and tax laws, in terms of their environmental implications. As well, some voluntary environmental initiatives of the private sector are considered. Finally, this paper recommends reforms to improve environmental decision-making in the private sector.

2. Integrating environmental principles and standards into business affairs

As discussed in Australian Panel of Experts on Environmental Law, *The Foundations of Environmental Law: Goals, Objects, Principles and Norms* (Technical Paper 1, 2017), the starting point for law reform is to identify and rationalise the guiding principles to underpin specific legislation and policy. Environmental law already recognises, at least notionally, the importance of addressing environmental problems systemically across all sectors of society, including the business community. Many prominent statements of environmental governance emphasise this goal. The principles of ESD as codified in the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (the *EPBC Act*), declare that: ‘decision-making processes should *effectively integrate* both long-term and short-term economic, environmental, social and equitable considerations’.⁸ More strongly worded, the *Rio Declaration on Environment and Development* of 1992 affirms that: ‘to achieve sustainable development, environmental protection shall constitute an *integral part of the development process* and cannot be considered in isolation from it’.⁹ Likewise, the *Treaty of the European Community* states: ‘Environmental protection requirements must be *integrated into the definition and implementation of (all) Community policies* and activities ... in particular with a view to promoting sustainable development’.¹⁰

The challenge, as identified in Australian Panel of Experts on Environmental Law, *The Foundations of Environmental Law: Goals, Objects, Principles and Norms* (Technical Paper 1, 2017), is to strengthen such aspirations through more rigorous expectations articulated in law, as well as to greatly improve implementation. Though many esteemed business commentators such as John Elkington, Michael Porter and Paul Hawken,¹¹ see ample opportunities for ‘win-win’ gains for the environment and the economy, achieving this aspiration has been difficult. The attractiveness of ‘win-win’ gains can be diminished by their often misaligned timing: the costs of environmental improvements are usually very tangible and upfront, while the promised benefits are less certain and long-term. This is problematic for business corporations sensitive to near-term performance pressures. Businesses face substantial disincentives to improve their environmental performance because of market failures to reflect the economic value of such efforts.¹² Eco-tourism ventures, for instance, depend on paying for themselves through the market. The business collapse of Earth Sanctuaries, Australia’s first public company dedicated to wildlife conservation and recovery, is evidence of the risk of such market failures.¹³ Environmental economists and others have evaluated how markets might be reoriented to play a more positive role,¹⁴ and legal institutions can be crucial for this reorientation.

In Australia, the legislative setting is often not coherent or integrated in the manner advocated by the foregoing statements and principles. Laws governing economic activity may work at cross-purposes to dedicated environmental laws, resulting in a confusing and ineffectual approach to managing the environmental activities of the private sector. While it is unrealistic to expect that any single law or regulatory agency alone can govern all facets of any specific environmental problem or issue, these various elements are needed at the very least to work in broad unison.

Business law can conflict with environmental goals in a variety of ways. The legal framework governing for-profit corporations can discourage companies from complying with the spirit of environmental legislation because of a countervailing imperative to promote shareholder returns. Consumer law can control misleading advertising about the environmental status of products and services, but it generally does not oblige businesses to make full disclosures about their environmental performance that could be useful to promote green consumerism. Tax law subsidises the cost of fossil fuels, thereby discouraging investment in alternative green energy to help mitigate climate change, while landowners conserving biodiversity may receive no tax concessions if they do not earn any taxable income from their property.

⁸ *Environment Protection and Biodiversity Conservation Act 1999* (Cth) s 3A(a) (emphasis added).

⁹ *Rio Declaration on Environment and Development*, UN Doc. A/CONF.151/26 (vol. I) / 31 ILM 874 (1992), Principle 4 (emphasis added).

¹⁰ *Rio Declaration on Environment and Development*, UN Doc. A/CONF.151/26 (vol. I), article 6 (emphasis added).

¹¹ John Elkington, ‘Towards the Sustainable Corporation: Win-win-win Business Strategies for Sustainable Development’ (1994) 36(2) *California Management Review* 90; Michael E Porter and Claas van der Linde, ‘Green and Competitive: Ending the Stalemate’ (1995) 73(5) *Harvard Business Review* 120; Paul Hawken, Amory Lovins and Hunter Lovins, *Natural Capitalism* (Little Brown, 1999).

¹² Jason Scorse, *What Environmentalists Need to Know About Economics* (Palgrave-Macmillan, 2010); Clement A Tisdell, *The Economics of Environmental Conservation* (Edward Elgar Publishing, 2005).

¹³ Barbara Aretino, et al, *Creating Markets for Biodiversity: A Case Study of Earth Sanctuaries Ltd* (Australian Productivity Commission, 2001).

¹⁴ Boyd Cohen and Monika I Winn, ‘Market Imperfections, Opportunity and Sustainable Entrepreneurship’ (2007) 22 *Journal of Business Venturing* 29.

Conceptually, a rethink is required about the presumption that there should be a discrete system of **environmental law** and instead aspire to a **law of the environment**. This transformation would mean, essentially, that environmental responsibility becomes a shared responsibility throughout social and economic life in Australia, with the standards and rules of environmental regulation extending to a variety of contexts so that society, government and business work cohesively and collaboratively towards common environmental aspirations. This shift would not imply abandoning core features of the environmental law system (for example, environmental impact assessment procedures and national parks), but would rather behave a supplement of new tools and processes to the existing arrangements and align the mandates and functions of government agencies, business corporations and other constituencies in a common framework for environmental stewardship.

Extending and inculcating environmental responsibility across society is an onerous challenge because some actors view environmental governance as only a responsibility of government, without any additional responsibilities of their own. For example, many financial investors have traditionally not bothered to scrutinise the environmental performance of companies so long as they adhere to minimum legal requirements – an attitude that overlooks how environmental performance beyond legal requirements may still affect financial returns. Similar truncated attitudes can be found in government agencies that have not traditionally had environmental responsibilities, such as in the finance and economic ministerial portfolios. Such attitudes might once have been understandable given limitations in the expertise or mandates of such organisations, but are hardly acceptable best practices today.

The business sector is, however, starting to recognise the need for a new approach, as evident in its growing support for action on climate change.¹⁵ Environmentally relevant decisions, from development of new green technologies to everyday operations of a business interacting with its customers and suppliers, are shaped by business law, and by the practices and policies of the business sector. Better management of the interplay between business law and environmental law, could generate a comprehensive system for governing environmental activities where environmental standards are embedded in economic affairs rather than confined to specialist environmental rules and agencies.

To align business law with the goals of environmentally responsible behaviour, it is important to identify the key principles that should shape that process of harmonisation. The guiding principles that should underpin this realignment include:

- **Sharing environmental responsibilities:** The influential *Millennium Ecosystem Assessment* concluded that: ‘natural assets will receive far better protection if their importance is recognized in the central decision making of governments and businesses, rather than relatively weak environment departments’.¹⁶ Environmental stewardship should be a shared undertaking, in which all groups and actors work towards common environmental goals. The law should continually seek to identify and facilitate opportunities for public authorities to share environmental governance with the private sector, while removing regulations and processes that result in the private sector receiving conflicting signals and incentives that undermine its commitment to environmental responsibility. Sharing responsibility also includes the private sector contributing to the cost of meeting environmental goals.
- **Fostering synergistic outcomes:** Building a coherent and responsive system of environmental governance is also furthered by finding ways to marry environmental goals with social and economic imperatives to foster ‘win-win’ solutions. For example, aligning the promotion of wind energy with regional economic development priorities can help align economic strategies with environmental goals. Similarly, price-based policy mechanisms that financially penalise pollution and other damaging activities or subsidise environmentally beneficial activities such as restoration of native vegetation, are means to foster productive synergies between the aspirations of the economy, society and the state. The law should exploit opportunities to advance environmental goals that provide collateral social and economic benefits that can motivate actors such as businesses to improve their environmental performance.

¹⁵ Angela Macdonald-Smith, ‘Groundswell of Business Support for Action on Climate Change’, *Sydney Morning Herald* (Sydney), 28 November 2015.

¹⁶ Millennium Ecosystem Assessment Board, *Living Beyond Our Means: Natural Assets and Human Well-being* (2005) 18–19.

- **Encouraging environmental innovation:** Decision-making on many environmental matters, such as climate change and biodiversity conservation, can benefit from collaborative approaches that harness the resources and expertise of all stakeholders, including business corporations.¹⁷ The private sector can complement and enhance the work of governments by bringing additional financial resources and technical expertise. Many solutions to environmental problems will likely need to come from the business community, such as new energy efficient technologies and more advanced pollution control methods and the laws should harness the entrepreneurial skills and expertise of the business world to generate the necessary innovations needed to promote sustainability. For instance, tax law can be modernised to provide greater financial incentives for investment in environmental innovations, and consumer law can be used to ensure disclosures to purchasers of products and services are more informative about their relative environmental merits.

¹⁷ Peter Grabosky, 'Using Non-Governmental Resources to Foster Regulatory Compliance' (1995) 8 *Governance* 527.

3. Business law and the environment

Some of the most important laws in Australia of environmental significance are business laws, such as legislation on corporate governance, securities regulation, tax law and financial markets rules. In indirect ways, these areas of law can have significant environmental repercussions and indeed may function antagonistically towards environmental legislation. These business laws may also adversely affect citizens and community groups by limiting their participation in economic and development decisions unless they have the wealth to participate as shareholders or other roles in the economy. This section of the paper examines different areas of business law from an environmental performance perspective. It draws attention to several important issues for future law reform, including improving the contribution of business law systematically to environmental governance, assessing the potential value of specific environmental performance standards in business law, and identifying environmental management functions that are suitable to delegate or share with the business sector.

3.1 Corporate law

3.1.1 Opportunities for environmental responsibility

The corporation is the principal organisation in Australia for undertaking commercial activities in mining, agriculture, manufacturing and numerous other economic sectors. Corporate law, which is embodied in the *Corporations Act 2001* (Cth) (the *Corporations Act*), controls the establishment and internal operations of companies, primarily by delineating the powers and roles of its members (shareholders) and their agents (managers) and creating checks-and-balances such as through a board of directors.¹⁸ The configuration of legal controls varies, with some differences between public and private companies, and between public companies limited by guarantee and limited by shares (that is, 'listed' on the stock market).

Although corporations are sometimes perceived as governed by an unadulterated imperative to maximise profits, this is a myth in terms of the expectations of corporate law. While the *Corporations Act* is largely silent on environmental considerations, apart from the duty on corporate directors to prepare an annual report that discloses their company's compliance with environmental regulation,¹⁹ the legislation is not overtly antagonistic to environmental responsibility, and indeed is not prescriptive about how a company should be managed.²⁰ Corporate law does not per se preclude a company from being managed in an environmentally focused manner, and thus a business may freely choose to prioritise environmental considerations such as making solar power or managing a wildlife sanctuary. To make such a commitment enduring, the law allows a company's shareholders to adopt by vote a constitution that can enshrine a specific mission, such as an environmental goal. This would then legally bind the company's executive officers.

With or without such a mission, the fiduciary responsibility of those who govern a company is to promote the success of the company, as a distinct legal entity, rather than to promote the interests of its shareholders, even though the interests of both overlap in practice. This distinction between the interests of the company and its members has helped to leverage growing legal acknowledgment that a company may be managed in a socially responsible way. Courts in Canada²¹ and legislatures in the United Kingdom²² have acknowledged this point in acquiescing to corporate managers who take decisions that aim to enhance the social standing of their company, a legal trend that some commentators call 'enlightened shareholder value'.²³ While Australian law does not yet explicitly reflect this trend, in 2006 the Parliamentary Joint Committee on Corporations and Financial Services issued a detailed report on the subject that concluded that the *Corporations Act* already permits directors to have regard to social and environmental

¹⁸ Janet Dine and Marios Koutsias, *The Nature of Corporate Governance* (Edward Elgar, 2013).

¹⁹ *Corporations Act 2001* (Cth) s 299(1)(f).

²⁰ Sjaafjell and Richardson, above n 2; Dunphy and Benn, above n 7.

²¹ *Peoples Department Stores Inc. (Trustee of) v. Wise* [2004] 3 SCR 461.

²² *Companies Act 2006* (UK) s 172.

²³ Cynthia A Williams and John M Conley, 'An Emerging Third Way? The Erosion of the Anglo-American Shareholder Value Construct' (2005) 38 *Cornell International Law Journal* 493.

issues and that no amendment of the law is required.²⁴ Also relevant is the influential Australian Stock Exchange (ASX) Corporate Governance Council Principles, of which Principle 3 states a 'listed company should act ethically and responsibly'. The accompanying commentary recommends:

Acting ethically and responsibly goes well beyond mere compliance with legal obligations and involves acting with honesty, integrity and in a manner that is consistent with the reasonable expectations of investors and the broader community. It includes being, and being seen to be, a "good corporate citizen", for example, by: ... acting responsibly towards the environment.²⁵

The ASX principles are not mandatory, though if a listed company chooses not to comply with a specific principle it must explain its reasons in its annual report filed with the ASX.

Another relevant feature of company law is the business judgement rule, which essentially means that courts will not hold corporate executives liable for poor judgements if done in good faith, with the care that a reasonable person would in such circumstances, and for the best interests of the company.²⁶ This judicial deference to business acumen means that courts will not readily scrutinise any disputed business decision unless corporate executives have acted in bad faith, with fraud or other serious failures. Thus, for instance, corporate bosses have ample legal scope to donate funds to a philanthropic cause if they judge reasonably that so doing will enhance their company's social standing and ultimate business success.

3.1.2 Barriers to environmental responsibility

Despite such latitudes, company law also potentially impedes environmental responsibility because the discretion given to corporate managers to act altruistically is also the discretion to act otherwise.²⁷ Company law, in other words, is a two-edged sword. The pressure to act self-interestedly tends to be stronger because of the competitive pressures of the market. Such pressure is strongest for companies that raise money from shareholders and bondholders. A company constituted as a private, family-run company, is better insulated from such market pressures, though ordinarily it must still be commercially successful to survive. Because the market often focuses on near-term performance in its valuation of companies, the market behoves businesses to act for the short-term. Reorienting the economic incentives and pressures of the marketplace in a more environmentally positive direction is crucial, and will require an equally powerful transition in reform of company law and other legal arrangements for private enterprise.

Beyond these core features of corporate governance and its market context, there are two further special situations where corporate law may affect environmental performance.

One situation owes to the doctrine of limited corporate liability, a privilege that protects shareholders against losses beyond their investment in the company. Limited liability flows from the cardinal principle that companies are legal entities separate and distinct from their individual members; thus, liability to a company's creditors is limited to the *company's* assets and does not extend to the *personal* assets of its shareholders or employees. This privilege is only removed in exceptional and extraordinary circumstances, referred to as 'veil piercing', such as perhaps where a single shareholder dominates a company.²⁸ The rationales for limited liability include that it encourages investment in business enterprise and spares shareholders the burden of closely monitoring a company for fear of liability.²⁹

Corporate groups may exploit the shield provided by limited liability to evade responsibility for environmental hazardous activities. A 'mother' company in the group can create separate (under-capitalised) subsidiaries, of which

24 Parliamentary Joint Committee on Corporations and Financial Services, Parliament of Australia, *Corporate Responsibility: Managing Risk and Creating Value* (2006) 63.

25 ASX Corporate Governance Council, *Corporate Governance Principles and Recommendations* (3rd ed, 2014) 19.

26 Lyman Johnson, 'Corporate Officers and the Business Judgment Rule' (2005) 60 *Business Lawyer* 439; *Australian Securities and Investments Commission v Rich* (2009) 236 FLR 1.

27 Kent Greenfield, *The Failure of Corporate Law: Fundamental Flaws and Progressive Possibilities* (University of Chicago Press, 2006).

28 Karen Vandekerckhove, *Piercing of the Corporate Veil* (Kluwer, 2008).

29 Frank H Easterbrook and Daniel R Fischel, 'Limited Liability and the Corporation' (1985) 52 *University of Chicago Law Review* 89.

it is a shareholder, to which are assigned responsibilities for undertaking hazardous activities. The actions of James Hardie Industries, a former manufacturer of asbestos who restructured its business allegedly to reduce its liability to numerous asbestos victims, is the most notorious example in Australia of the barriers limited liability and the corporate veil pose to recovery of the costs of environmental-related damage.³⁰

Manifestation of such risks has, in turn, sometimes necessitated special legislative interventions. In the United States, the existence of thousands of orphaned brownfield sites blighted by chemical contamination moved the Congress in 1980 to enact the 'Superfund' legislation³¹ to raise industry levies or impose liability to pay for clean-ups. The American reform however left the underlying corporate law unchanged, as is the case in other jurisdictions including Australia. Limited liability may also shield corporate managers from personal responsibility, unless this is overridden by specific legislation, such as Victoria's *Environment Protection Act 1970*, which provides that corporate managers and directors will be personally liable for any offences committed by the corporation, subject to specific statutory defences.³² Recently, the Queensland government introduced the *Environmental Protection (Chain of Responsibility) Amendment Act 2016* (Qld), which can allow environmental protection orders to be issued against 'a party' that had some relevant association with a company that was in financial distress (for example, a parent company or senior manager), and thereby to enable cost recovery for the cleanup of environmental damage created by that company.

The second potential barrier that corporate law may pose to improving environmental performance is its impact on social investors who wish to influence a firm's environmental policies and practices. While social investors may choose to divest from an unyielding firm, that tactic is unlikely to be effective in changing corporate behaviour unless many investors act likewise.³³ Alternatively, investors may retain a stake to exercise pressure collaboratively from within using their shareholding rights, however such shareholder alliances and pressures are not easy to secure in a large public company with thousands of shareholders having different economic or environmental values. Corporate law in Australia, as throughout the Anglophile world, contains mechanisms that limit the voice of shareholders, such as obliging shareholders who wish to call a special meeting to pay for the cost of convening the meeting; requiring high voting majorities for special resolutions to pass (at least 75% of eligible members to amend a company's constitution/articles of association); and limiting the capacity of shareholders to coordinate action (for example, collaborating to replace directors may trigger the takeover and substantial holding requirements of the *Corporations Act*).³⁴

The assumption among many in the business community that environmental standards are preferably quarantined in separate, external regulation as opposed to being incorporated into corporate governance, should be questioned. Although 'external' environmental regulation remains essential (for example, pollution control licensing), embedding environmental standards inside corporate governance could help minimise the tensions that business managers face when reconciling conflicting public and private expectations. Market pressures to prioritise profits create powerful incentives to avoid paying for environmental externalities. Conversely, environmental regulation seeks to communicate responsibility for such externalities and thereby constrain profit-making. How this might be achieved through legal reform is a challenging question.³⁵

In searching for models to redesign corporate governance towards a more environmentally responsible regime, it is important to be aware that the business sector already has institutional alternatives. One is the cooperative, one of the oldest economic institutions in the world: the cooperative structure allows its members to collaboratively pursue charitable and commercial goals.³⁶ Because of their democratic governance and emphasis on meeting the needs of members, cooperatives are sometimes regarded as 'associations of persons' in contrast to business corporations as 'associations of capital'. Their global importance for sustainable development and social innovation is reflected in the United Nations General Assembly declaring 2012 the 'International Year of Co-operatives'. Co-operatives have been

30 Peter Prince, Jarome Davidson and Susan Dudley, 'In the Shadow of the Corporate Veil: James Hardie and Asbestos Compensation' (Research Note 12, Parliamentary Library, 2004).

31 *Comprehensive Environmental Response, Compensation, and Liability Act* 42 USC § 9601 (1980).

32 *Environment Protection Act 1970* (Vic) s 66B(1).

33 Benjamin J Richardson, 'Are Social Investors Influential?' (2012) 9(2) *European Company Law* 133.

34 Michael J Whincop, 'The Role of the Shareholder in Corporate Governance: A Theoretical Approach' (2001) 25(2) *Melbourne University Law Review* 418.

35 Karen Bubna-Litic, 'Climate Change and Corporate Social Responsibility: The Intersection of Corporate and Environmental Law' (2007) 24 *Environmental and Planning Law Journal* 253.

36 International Co-operative Alliance, *Co-operative Identity, Values and Principles* <<http://ica.coop/en/whats-co-op/co-operative-identity-values-principles>>.

widely used in Australia and many other countries, particularly in the agriculture and housing sectors. However, the co-operative model has never been especially popular in the business community. Entrepreneurs can be reluctant to put resources into a co-operative because of lack of control and the complicated decision-making processes.³⁷ Further, co-operatives have less access to most traditional sources of capital: they cannot raise money from the share market, and bank finance is often quite restricted because of conservative lending criteria.³⁸

3.1.3 Combining business and community goals

The limitations of both the for-profit corporation and the co-operative have contributed recently to legislative reforms to create a new corporate 'hybrid' that combine both commercial and community objectives in its legal governance.³⁹ Introduced in some Anglophone nations and commonly known as the 'benefit corporation' (United States) or 'community interest company' (United Kingdom), this novel corporate form has legal characteristics, including (depending on the jurisdiction): a legal duty to promote a community benefit, in addition to a financial return for the company; an asset lock and dividend cap (which restricts company assets and profits from being transferred to ensure the company continues to be properly capitalised and able to meet its community purpose); and an annual community contribution report that documents the company's community impact. The British model also uniquely establishes a regulatory agency with responsibility to supervise compliance and maintain the integrity of the system.⁴⁰ As a public company with investor shareholders, the corporate hybrid has the advantage over charitable trusts of having wider access to the capital markets to raise funds and, as a profit-making enterprise, it also enjoys a broad plenary power to pursue a range of profitable ventures. As well, because the company is legally obliged to achieve a community benefit, it is legally protected to engage in environmental activities or other socially valuable projects even if such activities lack a defensible business case. Also, because of the restrictions (in some models) on selling shares or paying out dividends, the corporate hybrid is governed by less short-term considerations contrary to sustainable development.

Hybrids are growing rapidly in popularity. Since 2010 in the United States, 31 states have enacted legislation to provide for the incorporation of benefit corporations, and there are about 1,300 such corporations in operation, while Britain has about 13,000 community interest companies as of July 2015.⁴¹ The Canadian provinces of British Columbia and Nova Scotia introduced their model in 2013 and 2015 respectively, with both seeing an uptake of the model by the social enterprise community.⁴² A number of companies now utilise this model in order to undertake environmental activities: one is EuCAN, a British company established in 2011 to promote community involvement in wildlife habitat management and restoration.⁴³

While the corporate hybrid model has not been introduced in Australia, even its adoption here would not solve all the foregoing problems of corporate governance. Because a corporate hybrid is, under existing legislative examples, a *choice* for companies, this model does nothing for existing companies that choose to remain within the conventional corporate law paradigm.

37 Peter Davis, 'The Governance of Co-operatives under Competitive Conditions: Issues, Processes and Culture' (2001) 1(4) *Corporate Governance* 28.

38 Carol Liao, 'Limits to Corporate Reform and Alternative Legal Structures' in B. Sjafjell and B.J. Richardson (eds), *Company Law and Sustainability: Legal Barriers and Opportunities* (Cambridge University Press, 2015) 274, 290-91.

39 Julie Battilana, et al, 'In Search of the Hybrid Ideal' (2012) *Stanford Social Innovation Review* 51.

40 *Companies (Audit, Investigations and Community Enterprise) Act 2004* (UK).

41 Data from Benefit Corporation <<http://benefitcorp.net>>; Regulator of Community Interest Companies, *Annual Report 2014/2015* (Her Majesty's Stationery Office, 2015).

42 Enacted pursuant to the *Business Corporations Act*, SBC 2002, c 57; *An Act Respecting Community Interest Companies*, SNS 2012, c 38.

43 See EuCan Community Interest Company <<http://www.eucan.org.uk>>.

3.2 Financial sector regulation

3.2.1 Environmental innovation

The financial sector has grown in economic significance to rival many parts of the productive sector such as mining and manufacturing. The finance industry now represents about 10% of the total added value of the Australian economy, doubling its contribution to the economy since the mid-1980s, mainly due to deregulation of the banking sector and growth in superannuation funds spurred by compulsory savings requirements.⁴⁴ Such growth makes financiers and investors not only influential in shaping economic development, but also relevant to the environmental performance of the economy. Financial institutions such as banks and superannuation funds might be able to help discipline corporations to improve their environmental performance.

At present, the laws governing financial institutions and transactions – such as the *Superannuation (Industry) Supervision Act 1993* (Cth) and the *Australian Securities and Investments Commission Act 2001* (Cth) – are largely silent on environmental performance. This is a lost opportunity in environmental governance, as investors can play a constructive role by funding environmental innovations, brokering trade in environmental goods and services, and making environmental stewardship a criterion for evaluating investments. The burgeoning voluntary movement for socially responsible investment (SRI) is catalysing such positive changes, as discussed later in this paper. Australian Panel of Experts on Environmental Law, *Energy Regulation* (Technical Paper 6, 2017) further explores the impact of financial sector regulation on the energy sector.

Until recently, few in the financial sector or among policy-makers saw investors or lenders as having much environmental relevance even though the financial economy has long been identified as extremely economically salient and potentially a vector of economic instability as borne out by the 2008 Global Financial Crisis.⁴⁵

On the positive side, the financial economy can potentially play a constructive role by mobilising investors to fund environmentally beneficial innovations and brokering trade in environmental goods and services. One example is the emerging carbon market, fuelled by carbon taxes and emissions trading schemes, which in recent years has grown exponentially with increasing participation from Chinese traders.⁴⁶ Investors can also help channel money to companies developing clean and renewable energy technologies and designing other products that have a low eco-footprint. The emerging ‘impact investing’ market denotes an explicit role for financial investors to directly fund and support projects that bring tangible economic, environmental and social benefits to communities and regions.⁴⁷ The inclusion of environmental criteria in financial due diligence, such as when issuing loans, is another means by which financial decisions can reinforce good environmental practices. However, there is evidence of practices to the contrary. Although some academic commentators believe ‘there is nothing inherent in the structure of the financial system which necessarily leads to environmental destruction’⁴⁸, many see the financial sector as complicit in the environmental impacts of the economy.⁴⁹ One example is Oxfam Australia, whose 2014 report ‘Banking on Shaky Grounds’ unveils how some major Australian banks have allegedly financed dubious land acquisitions in developing countries that are contributing to environmentally destructive land use practices.⁵⁰ Another example is the recent spotlight on Australian banks for funding coal mining and other fossil fuel industries. The legal separation between those who provide capital and control a business, the hallmark of corporate capitalism, may diminish investors’ knowledge of and concern about the environmental performance of companies they fund. Investors may be physically remote from the activities that directly impact the environment, such as a mining operation, thus weakening any sense of responsibility they might have for taking corrective action. Further intensifying this outlook, investors’ portfolios tend to comprise thousands of companies and other assets, with only tiny fractional stakes in any individual business,

44 Rodney Maddock, ‘Is The Australian Financial Sector Too Big?’ (Australian Centre for Financial Studies, July 2013).

45 See Robert J Shiller, *Irrational Exuberance* (Princeton University Press, 2000); John Bogle, *The Battle for the Soul of Capitalism* (Yale University Press, 2005).

46 ‘Global Carbon Market to Reach Record Volumes by 2016’, *Australian Business Review* (28 February 2014); see also World Bank Group, *State and Trends of Carbon Pricing* (World Bank, 2015) 13.

47 Antony Bugg-Levine and Jed Emerson, *Impact Investing: Transforming How We Make Money While Making a Difference* (Jossey-Bass, 2011).

48 Mark White, ‘Environmental Finance: Value and Risk in an Age of Ecology’ (1996) 5 *Business Strategy and the Environment* 198, 200.

49 William Sun, Celine Louche and Roland Pérez (eds), *Finance and Sustainability: Towards a New Paradigm? A Post-Crisis Agenda* (Emerald Books, 2011).

50 Oxfam Australia, *Banking on Shaky Grounds: Australia’s Big Four Banks and Land Grabs* (Oxfam Australia, 2014).

thus making it difficult for investors to monitor the environmental performance of companies, let alone to care about such performance. The growth of institutional investing, through intermediaries such as superannuation funds, may help diminish such obstacles if fund managers are committed to high environmental performance. The ease of selling securities (corporate shares and bonds) can further diminish the perceived importance of investors' relationship with the company, as their stake in an underperforming company can easily be sold. The net result of these factors is a potential diminution of investors' sense of moral agency for the economic activities they fund.

3.2.2 Legal gaps and opportunities

The law also helps to explain the foregoing behaviour. Superannuation funds, governed primarily by the *Superannuation Industry (Supervision) Act 1993* (Cth), incorporate fiduciary investment standards⁵¹ that the former Insurance and Superannuation Commission viewed as excluding non-financial investment criteria unless they were material to financial risk and performance.⁵² Otherwise, there are no legal obligations that any super fund must meet environmental or social performance outcomes. Likewise, Australian banking and insurance sector regulation is bereft of any environmental performance standards, which means environmental issues are likely only to be addressed in the context of legal due diligence standards to consider financially material risks and opportunities.

So far, few governments in the world have sought to regulate the financial economy to address such lacunae, but some tentative reforms have emerged that may lay the groundwork for a more comprehensive approach. Legal measures (in the form of incentive and informational policy instruments) to promote socially and environmentally sensitive investing have emerged in some countries over the past decade or more, but they leave largely untouched the freedom of investors to choose how to generate returns.⁵³ One example is the requirement for funds to disclose their policies for considering social and environmental issues, and policies for exercising their shareholder votes on such issues. This reform, which has been introduced since 2000 in several European Community member countries, as well as in Australia and New Zealand, generally targets pension/superannuation funds.⁵⁴ Interestingly, Australian legislation also gives fund members the right to choose where their monies are invested, thereby enabling socially-minded investors to switch to one of the burgeoning ethical or green funds.⁵⁵ But there is no obligation on super funds to invest ethically and responsibly. Economic incentives to alter the cost-benefit calculations of financiers in favour of sustainable development choices have also been introduced. A notable example is the Netherlands' Green Project Directive,⁵⁶ which some research credits as having significantly boosted funding for environmental-friendly projects.⁵⁷ No equivalent scheme exists in Australia, although taxation law (discussed later in this paper) can provide some concessions and incentives for investment in environmental industries and products.

One critically important area of financial markets governance that remains unaltered in Australia, and other jurisdictions, is the fiduciary and trust law responsibilities of investment funds. This is a significant lacuna as the prevailing fiduciary responsibility of financial trustees in superannuation funds, endowment funds and other financial entities managed under a trust structure has a major influence on their investment goals and strategies.⁵⁸ Case law from the United States and the United Kingdom suggests that financial trustees may be inhibited from including environmental and social criteria in their investment decisions if such criteria might jeopardise financial returns.⁵⁹ If the financial sector is to become more aligned to the evolving environmental performance expectations of society, it will likely be necessary to redefine the fiduciary responsibility rules and equivalent standards that govern investors and

51 *Superannuation Industry (Supervision) Act 1993* (Cth) ss 7, 52(2), 62.

52 Insurance and Superannuation Commission (ISC), *Superannuation Circular III.A.4. The Sole Purpose Test and Ancillary Purposes* (ISC, 1995).

53 Benjamin J Richardson, *Socially Responsible Investment Law: Regulating the Unseen Polluters* (Oxford University Press, 2008).

54 For example, *Occupational Pension Schemes (Investment) Regulations 2005* (UK) cl 2(3)(b)(vi)-(3)(c); Australia's *Corporations Act 2001* (Cth) s 1013D(1)(l); France's *Projet de loi sur l'épargne salariale No. 2001-152* (France), 7 February 2001, arts 21, 23; and New Zealand's *KiwiSaver Act 2006* (NZ) s 205A.

55 *Superannuation Legislation Amendment (Choice of Superannuation Funds) Act 2005* (Cth).

56 Regeling groenprojecten buitenland, *Staatscourant* 1 (2 January 2002) 31; Regeling groenprojecten, *Staatscourant* 131 (11 July 2005) 13.

57 Vereniging van Beleggers voor Duurzame Ontwikkeling (VBDO), *Socially Responsible Savings and Investments in the Netherlands: Developments in Volume and Growth of Socially-responsible Savings and Investments in Retail Funds* (VBDO, 2005) 11.

58 For further analysis, see Benjamin J Richardson, 'Governing Fiduciary Finance' in Tessa Hebb et al (eds), *Routledge Handbook on Responsible Investing* (Routledge, 2015) 650.

59 See *Cowan v Scargill* [1985] Ch 270; *Board of Trustees of Employee Retirement System of the City of Baltimore v City of Baltimore*, 562 A.2d 720 (Md Ct App, 1989).

lenders, as recommended by many including the World Economic Forum in its advice that governments should ‘modify pension fiduciary rules which discourage or prohibit explicit trustee consideration of social and environmental aspects of corporate performance’.⁶⁰

Finally, it should be recognised that governments themselves participate in the market as financial investors and thus it is essential that governments follow the same environmentally sensitive practices that might be expected of the private sector. Sovereign wealth funds are one of the largest pools of financial capital held by states, and several jurisdictions including France, New Zealand and Norway have adopted legislation to require their national funds to invest with regard to ethical, social and environmental factors.⁶¹ The Commonwealth’s Future Fund is not explicitly governed by such standards, although ministerial investment directives may to some extent be used to facilitate consideration of such factors.

3.3 Tax law

3.3.1 Current tax concessions

Tax law is a powerful instrument to shape environmental behaviour. But which tax instruments offer the best means of leveraging improvements in individual and corporate environmental behaviour? Taxation itself is one of several economic policy instruments, including tradeable environmental allowances, financial subsidies, and environmental offsets, which can enhance incentives for corporations and individuals to behave more environmentally responsibly. Historically, Australian tax law contained many perverse incentives that encouraged poor environmental practices, such as the tax deductions offered before 1983 to farmers for land clearance. In recent years, tax law has been harnessed more as a means to foster positive incentives, such as the carbon tax that operated between 2011 and 2014. This short-lived tax also showed the political stigma that some attach to environmental taxes or other pricing mechanisms. While some taxation instruments have been used by state and local governments to encourage positive environmental behaviour, such as concessions on land tax and municipal rates for landowners who enter into a conservation covenant, to date some opportunities for the use of taxation law to achieve environmental outcomes have been overlooked in Australia.

The *Income Tax Assessment Act 1997* (Cth) (*ITAA*) allows taxpayers to claim as a deduction against their income a variety of expenses incurred in earning that income, and these expenses may include environmental costs. Like other tax systems worldwide, the *ITAA* distinguishes between capital and revenue expenses: expenditure of a capital nature generally can only be claimed as a deduction on a depreciated cost formula that may extend over many years, while revenue expenses can be fully claimed against income in the same tax year. Thus, revenue expense deductions are usually much more attractive to taxpayers.

The *ITAA* provides for an immediate tax deduction for some environmental protection activities related to income earning activities.⁶² However these activities are narrowly defined, being limited to the prevention, fighting or remedying pollution or treating, cleaning up, removing or storing waste, resulting from income producing activities.⁶³ Determinations by the Australian Taxation Office (ATO) have considered requests for other expenses to be immediate tax deductions, such septic tanks and plantings, and the ATO has declared the determinative question to be whether the dominant purpose of the capital expenditure is an environmental protection activity. Another section of the *ITAA* allows for immediate deduction of capital expenditures incurred on a landcare operation if the taxpayer is a primary producer or carrying on a business using rural land.⁶⁴ Otherwise, environmental improvements such as installation of solar panels may be deductible business expenses under a depreciation formula over a number of years.

⁶⁰ World Economic Forum (WEF), *Mainstreaming Responsible Investment* (WEF, 2005) 10.

⁶¹ Benjamin J Richardson, ‘Sovereign Wealth Funds and Socially Responsible Investing: An Emerging Public Fiduciary’ (2013) 2 *Global Journal of Comparative Law* 125.

⁶² *Income Tax Assessment Act 1997* (Cth) (*ITAA*) s 44.755.

⁶³ *Ibid* s 44.755(2).

⁶⁴ *Ibid* s 40.630.

This distinction between capital and revenue expenditure is important because expenses that cannot be claimed as capital in nature may disincentivise investment in some environmental innovations. If a company wants to move into renewable energy infrastructure, for instance, it has either to borrow to invest, or raise capital or take money from an existing income stream. Whichever option it takes, it will conscript large amounts of money and it must wait for a longer period (maybe up to 20 years) to claim the full depreciation.

Two other main areas relating to the environment in the *ITAA* are deductions of gifts to environmental organisations,⁶⁵ and deductions for conservation covenants.⁶⁶ The former concession has been instrumental to supporting the work of many environmental organisations, especially in an era of declining government grants. The availability of such concessions has been questioned because of the perception that the activities of some beneficiaries are ‘political’ rather than charitable in nature.⁶⁷ The *ITAA* deduction for conservation covenants can benefit landowners who enter into a covenant approved by a government agency. The amount of the deduction claimable is the difference between the market value of the land just before and after the covenant. However, one must first pay a fee to the ATO and pay for a property valuation in order to apply for this deduction – a problematic expense that arguably should be borne by the government given that it is the beneficiary of the covenant. Furthermore, any reduced value of a property burdened by a covenant may become a future tax liability for the landowner if the property is subject to capital gains tax.

Additional tax relief for covenants is provided by some state and local governments, such as exemptions from land taxes and local council rates. The advantage of a land tax exemption is negated by the fact that primary producers are ordinarily exempt from such taxes. Local council rates concessions are highly uneven: in NSW, all covenanted property receives a complete exemption while in Tasmania some local governments do not offer any financial concessions. Conversely, because undeveloped land may still incur state and local property taxes, there remains an incentive for landowners to develop their property to meet tax liabilities.⁶⁸

3.3.2 Options for reform

The taxation system has enormous potential to provide innovative incentives for environmental outcomes. One opportunity is to remove the distinction between capital and revenue expenditures by offering one-off capital deductions for a wider range of environmental improvement activities. For example, in 2014 the Australian government announced an immediate \$20,000 capital deduction to stimulate investment by small business.⁶⁹ A similar capital deduction could be targeted to businesses that are prepared to move their operations to a low or non-carbon basis. If this policy were coupled with an industry policy designed to support sustainable industries (or sustainable innovation) in Australia, it would create the additional benefit of stimulating the low carbon economy, establishing a new industry in Australia to provide the capital equipment and services to support the transition and maintenance of a low carbon economy, and it would provide collateral employment and training opportunities in Australia.

Another opportunity for tax reform is in regard to land management and conservation. A limitation of the current system is that nature conservation expenses are not tax deductible unless they are directly related to the commercial use of that property (for example, agriculture or an eco-tourism resort).⁷⁰ The incentive effect encourages landholders to put or keep land in production rather than conserve it.⁷¹ Another lost opportunity is that people who donate land to governments for the addition to the public conservation estate do not receive a tax credit, which is a problem given that sometimes this is more desirable than donating such land to a private charity.⁷²

⁶⁵ Ibid Subdivision 30E (Register of environmental organisations).

⁶⁶ Ibid Division 31 (Conservation covenants).

⁶⁷ In 2015, a parliamentary inquiry was established to examine this issue: Australian Broadcasting Corporation, ‘Environmental Groups Face Tax Deductibility Loss in Government Push’ *ABC 7.30 Report* 10 April 2015 (Conor Duffy).

⁶⁸ Carl Binning and Mike Young, *Conservation Hindered: The Impact of Local Government Rates and State Land Taxes on the Conservation of Native Vegetation* (CSIRO, 1999).

⁶⁹ Australian Government, *Budget 2015* <<http://www.budget.gov.au/2015-16/content/highlights/jobsandsmallbusiness.html>>.

⁷⁰ *ITTA*, s 40.635 (meaning of ‘landcare operation’).

⁷¹ Margaret McKerchar and Cynthia Coleman, ‘The Australian Income Tax System: Has It Helped or Hindered Primary Producers Address the Issues of Environmental Sustainability?’ (2003) 6(2) *Journal of Australian Taxation* 201.

⁷² See further Nature Conservancy Australia, *Submission to the Review Process for Australia’s Future Tax System* (October 2008).

The lack of tax reform has left the economy with a variety of perverse incentives that hinder a shift towards environmental sustainability. In 2015, fossil fuel subsidies in Australia, such as to diesel fuels, equated to around \$1,712 per person,⁷³ much of which goes to support the mining sector. Pricing of utilities is another area affected by counterproductive incentives in terms of environmental outcomes. Water and sewerage rates in Australia are mostly a fixed charge, based on property values with water usage being a very small part of the total bill. Having water usage as the larger part of the billing system would not necessarily result in less revenue for the water utilities if the cost of variable consumption increases, and it would likely lead to positive environmental outcomes of particular value during droughts. Similar pricing applies to electricity, with much of the fixed costs being the costs of poles and wire infrastructure.⁷⁴

In reforming the Australian taxation system to achieve better environmental performance, it will be necessary not only to realign tax breaks and concessions away from environmentally damaging to sustainable activities, but also to link tax reform to a wider use of economic policy instruments to ensure that environmental costs and benefits are reflected in market prices. Eco-taxes, tradeable environmental allowances and liability standards are among the tools needed to incentivise companies and investors to improve their performance. This broader agenda, sometimes known as ecological tax reform,⁷⁵ is in its infancy in Australia, especially since the repeal of the carbon tax. Other jurisdictions illustrate how effective the tax system can be. Environmental taxes have been used extensively around the world,⁷⁶ but have had only modest uptake in Australia.⁷⁷ Environmental taxes provide an opportunity to reduce the environmental impacts of industry and to support those businesses that develop more sustainable practices and products, thereby placing them at a competitive advantage over less environmentally efficient businesses, resulting in more appropriate development, increased employment and improved environment outcomes.⁷⁸ The role of carbon pricing in regulatory reform is explored further in Australian Panel of Experts on Environmental Law, *Energy Regulation* (Technical Paper 6, 2017).

3.4 Other areas of business law

Corporate law, financial investing law and tax law are the main areas of business governance that need attention from environmental policy-makers, but they are not the only part of the agenda. One can identify a variety of other laws governing commercial activity that have environmental ramifications, such as consumer law and trade law. This *Technical Paper* does not provide the space to explore in detail these other areas of business law, but a few observations will be made.

Australian consumer law is largely a federal responsibility undertaken primarily through the *Australian Consumer Law Act 2010* (Cth), as administered by the Australian Competition and Consumer Commission (ACCC). The federal regime does not provide positive obligations on businesses to disclose to the public the environmental qualities or impacts of their products and services. A business does not, for instance, need to advise prospective consumers of its carbon footprint or how it manages pollution waste or its use of natural resources. The ACCC regime, instead, focuses on disciplining misleading or deceptive conduct.⁷⁹ Such conduct, for instance, might occur if a food producer advertised its goods as 'organic' when in fact they were made with chemical additives.⁸⁰ The ACCC regime is certainly a major improvement on common law rules of contract for addressing misleading claims, in that it offers additional remedies and enforcement machinery, but it fails to embody environmental disclosure standards that would help develop green consumerism.

73 Quoted in Damian Carrington, 'G20 Countries Pay Over \$1,000 Per Citizen in Fossil Fuel Subsidies, Says IMF', *The Guardian* (online), 4 August 2015; see also Australian Panel of Experts on Environmental Law, *Energy Regulation* (Technical Paper 6, 2017) recommending a removal of the fossil fuel subsidies.

74 Paddy Manning and Brian Robins, 'High Power Rates: It's a Poles and Wires Story' *Sydney Morning Herald* (online), 12 June 2012.

75 Evon Weiszäcker and J Jesinghaus, *Ecological Tax Reform* (Zed Books, 1992).

76 See Organisation for Economic Co-operation and Development, *Taxation, Innovation and the Environment* (OECD, 2010).

77 Benjamin J Richardson, 'Economic Instruments in Australian Pollution Control Law' in Gerry Bates and Zada Lipman (eds), *Pollution Law in Australia* (Butterworths, 2002) 51.

78 Karen Bubna-Litic and Lou de Leeuw, 'Can Our Taxation System Support 'New' Sustainable Industries? The Argument for Eco-Taxes' (1999) 16(2) *Environmental and Planning Law Journal* 140.

79 *Competition and Consumer Act 2010* (Cth) sch 2 s 18. For leading cases on interpretation of this pivotal section (in its predecessor, the *Trade Practices Act 1974* (Cth)); see *Parkdale Custom Built Furniture Pty Ltd v Puxu Pty Ltd* (1982) 149 CLR 191; *Yorke v Lucas* (1985) 158 CLR 661.

80 Australia Competition and Consumer Commission, 'Fake Food Claims Leave Bitter Aftertaste' *ACCC Update* 12 (Autumn, 2012).

Positive environmental disclosure standards have been developed outside of the ACCC regime, but they apply narrowly to specifically regulated environmental products and services or entities. For instance, the *National Greenhouse and Energy Reporting Act 2007* (Cth) requires industry to report its greenhouse gas emissions, abatement actions, energy consumption and production. Relatedly, the *Greenhouse and Energy Minimum Standards Act 2012* (Cth) creates a national framework for product energy efficiency in Australia, including a standardised, energy rating labelling system. On the other hand, a proposal in 2015 to extend seafood origin labelling laws, which would have helped seafood consumers make more environmentally responsible purchasing decisions, was rejected.⁸¹ It remains open to some debate of course as to what kind of environmental information retailers should be obliged to disclose to consumers, and how to enable consumers to effectively compare the environmental performance of different products and services.

Also relevant to reforming Australia's environmental laws is trade law; the mixture of national law and public international law that applies to transactions of goods or services across national boundaries. Trade within Australia among the states is constitutionally protected from economically motivated protectionist restrictions. Section 92 of the *Australian Constitution* has been interpreted by the High Court as barring economic protectionist or discriminatory measures that confer an advantage on intrastate trade or commerce.⁸² Trade law is influential in shaping economic growth and creating opportunities for markets to expand, which has important long-term environmental consequences, and in addition trade law may introduce specific environmental standards on imports and exports, such as for public health and biosecurity reasons. Although the proposed *Trans-Pacific Partnership* is doubtful because of its rejection by the US Trump Administration, Australia continues to participate in a variety of bilateral and multilateral trade agreements. Through global trade, additional environmental threats can arise, such as spread of invasive species such as the destructive 'fire ants' from Latin America that have in recent decades appeared in southeast Queensland. Conversely, trade can give Australian businesses and consumers greater access to new environmental technologies and products developed more efficiently abroad (for example, most solar panels on Australian homes come from Chinese or German factories).

In recent years, the growth in free trade agreements has become controversial from the standpoint of maintaining strong environmental regulations because of the perception that trade agreements give foreign governments or foreign companies additional leverage to challenge domestic environmental legislation. In particular, treaties that provide for investor-state dispute settlement (ISDS) have become contentious in Australia and elsewhere.⁸³ ISDS clauses give investors (often multinational corporations) direct access to international arbitration where they can lodge claims against a government over regulatory measures that they argue damage their bottom line. ISDS raises the standard of treatment of foreign investors above that of domestic investors by giving them an alternative to the traditional venue for complaints against a government - domestic courts. It also raises fears of a phenomenon known as 'regulatory chill', whereby governments may fail to enact or enforce legitimate regulatory measures due to concerns about ISDS. ISDS disputes have proliferated in recent years, with many involving costly challenges to environmental regulations amongst other matters. Any regulatory measure - whether promulgated at the local, state or federal level - on any issue (from banning a pesticide to introducing a carbon tax) can become the subject of an ISDS case if it has an adverse economic impact on a foreign investor.

There is a small but growing body of work that verifies the existence of regulatory chill. The Canadian government settled a dispute with Ethyl Corporation, compensating the company and retracting its ban on the gasoline additive MMT. There are differing views on whether the government capitulated because it was concerned that it would lose an ISDS case or if other factors were of primary significance (for example, a successful internal legal case brought by several provinces on the issue).⁸⁴ Another example is when Indonesia exempted some foreign investors from a ban

81 *Food Standards Amendment (Fish Labelling) Bill 2015* (Cth).

82 *Cole v Whitfield* (1988) 165 CLR 360; [1988] HCA 18. Section 92 thus does not necessarily bar state legislation that restricts trade in a non-discriminatory manner for non-economic reasons, such as to achieve conservation objectives, as in the *Cole v Whitfield* case.

83 Kyla Tienhaara, 'Regulatory Chill and the Threat of Arbitration: A View from Political Science' in Chester Brown and Kate Miles (eds), *Evolution in Investment Treaty Law and Arbitration* (Cambridge University Press, 2011) 606.

84 Simon E Gaines, 'The Masked Ball of NAFTA Chapter 11: Foreign Investors, Local Environmentalists, Government officials, and Disguised Motives' in John Kirton and Virginia W MacLaren (eds), *Linking Trade, Environment, and Social Cohesion: NAFTA Experiences, Global Challenges* (Ashgate, 2002) 103.

on open-pit mining in protected forests after receiving threats of arbitration claims in the range of US\$20-30 billion. The timing of the government's actions, statements to the media and other factors suggest that the government was strongly motivated to remove the threat of arbitration.⁸⁵

85 Kyla Tienhaara, *The Expropriation of Environmental Governance: Protecting Foreign Investors at the Expense of Public Policy* (Cambridge University Press, 2009).

4. Voluntary initiatives in the private sector

Government legislation and trade agreements are not the only determinants of the environmental behaviour of the private sector. Many industry groups, networks of financial investors and individual companies are taking the initiative to raise their environmental performance beyond the letter of the law. They may do so for one of many reasons, including financial advantage, pressure from stakeholders, innate altruism or to stave off unwelcome government regulation.⁸⁶ The expression 'triple bottom line', which captures the idea that economic, social and environmental factors are interconnected and essential to commercial success, has now become a familiar idiom in business parlance.⁸⁷ Since 2008, the United Nations 'Protect, Respect and Remedy' framework developed by United Nations Special Representative John Ruggie has emerged as an influential standard (now known as the United Nations *Guiding Principles on Business and Human Rights*) for articulating best practice for corporate social and related environmental behaviour around the world.⁸⁸

These voluntary initiatives are commonly labelled 'corporate social responsibility' (CSR), for regular business enterprises, or 'socially responsible investing' (SRI), for financial investors. Their efforts may be expressed in diverse ways, for example, companies are invited to commit through voluntary codes and standards, environmental certification schemes or individual initiatives within a single business such as adoption of a new environmental policy or management unit. Thus, CSR and SRI provide pathways by which the business community can innovate and find synergistic outcomes for themselves and the natural environment.

At present, there is little coordination between these private sector activities and government legal arrangements. These activities can either be mutually supportive, or result in confusion and suboptimal performance. This is a significant challenge and a significant opportunity for environmental governance in the future. A fundamental issue to resolve is how the law should acknowledge and facilitate voluntary efforts to protect and manage the environment, such as corporate codes of conduct.

The CSR movement in Australia and many other countries is helping to modify business cultures by making corporate decision-makers more considerate of ethical factors, the needs of other stakeholders such as local communities, as well as more cognisant of the financial materiality of environmental activities and impacts.⁸⁹ Numerous industry codes of conduct and standards, developed by the business community alone or in collaboration with other stakeholders, provide an increasingly important part of the fabric of environmental governance for Australian business even though such codes and standards ostensibly involve only voluntary obligations. Examples include the Australian Minerals Council Code of Environmental Management, Responsible Care, ISO 26000, the United Nations *Global Compact*, the Ruggie framework (as noted above) and many more.⁹⁰ Codes of conduct, though 'voluntary', can have legal consequences. A bank may require a borrower to comply with a CSR code when the borrower is planning to engage in an environmentally risky project (such as the *Equator Principles* that apply to project financing).⁹¹ Similarly, a retailer who subscribes to a voluntary eco-labelling scheme will incur legal consequences if its advertised products do not accurately reflect the asserted environmental performance criteria. Apart from these legal ramifications, CSR codes and standards can be behaviourally influential - and thus resemble legal effects - because of industry peer-pressure, scrutiny from environmental watchdogs or consumer pressure.

While the CSR movement can catalyse environmental innovations and leadership in the business community, it also has many critics who see CSR as camouflage for unscrupulous or perfunctory behaviour, and it may even dangerously lead to complacency that further reform of environmental law or business law is unnecessary.⁹² The capacity of CSR to

⁸⁶ Elizabeth Garriga and Domenec Mele, 'Corporate Social Responsibility Theories: Mapping the Territory' (2004) 53 *Journal of Business Ethics* 51.

⁸⁷ Andrew Savitz, *The Triple Bottom Line: How Today's Best Run Companies Are Achieving Economic, Social, and Environmental Success – and How You Can Too* (Jossey-Bass, 2006).

⁸⁸ John Ruggie, *Promotion and Protection of all Human Rights, Civil, Political, Economic, Social and Cultural Rights including the Rights to Development. Protect, Respect and Remedy: A Framework for Business and Human Rights*, UN Doc A/HRC/8/5 (UN Human Rights Council, 2008).

⁸⁹ Andrew Crane et al, (eds), *The Oxford Handbook of Corporate Social Responsibility* (Oxford University Press, 2008).

⁹⁰ Stepan Wood, 'Voluntary Environmental Codes and Sustainability' in Benjamin J Richardson and Stepan Wood (eds), *Environmental Law for Sustainability* (Hart Publishing, 2006) 229.

⁹¹ Benjamin J Richardson, 'The Equator Principles: The Voluntary Approach to Environmentally Sustainable Finance' (2005) 14 *European Environmental Law Review* 280.

⁹² Joel Bakan, *The Corporation: The Pathological Pursuit of Profit and Power* (Free Press, 2004); S Beder, *Global Spin: The Corporate Assault of Environmentalism* (Green Books, 2002).

induce positive behaviour may be undermined by a multitude of factors, including the free-rider effect, countervailing market pressures, imperfect environmental information, and the absence of credible sanctions for non-compliance.⁹³ Thus, as leading critic David Vogel concludes, the 'most effective strategy for reconciling private business goals and public social purposes remains what it has always been, namely effective government regulation'.⁹⁴

In the financial economy, a parallel movement for social and environmental responsibility is underway. Known as SRI, 'ethical investing' or 'responsible investing', it generally means use of environmental, social and governance (ESG) criteria in financial decisions such as issuing loans or acquiring corporate shares. The movement has attracted a number of mainstream financial institutions, as well as churches, trade unions, universities and others interested in promoting respect for human rights or environmental improvements through the power of financial investing.⁹⁵ As with CSR, diverse motivations shape SRI practices: some investors prioritise ethical criteria, others treat SRI as additional due diligence to improve financial returns, while some believe both goals can be pursued in a 'win-win' strategy. The diverse methods of SRI include screening investments, engaging with corporate managers through shareholder action, and assisting communities through targeted impact investing.

CASE STUDY

One example of how environment-conscious financiers can discipline companies is when investors effectively blocked a controversial pulp mill in Tasmania. In May 2008, the Australian and New Zealand (ANZ) Bank declined to fund a pulp mill proposed by Gunns, a then major forestry operator. Although the ANZ publicly declined to elaborate its reasons for shunning the project, worth about \$2 billion, the bank was likely to have been concerned about the pulp mill's potential environmental impacts, or at least negative publicity about such impacts. As a signatory to the *Equator Principles*, a global voluntary SRI code, the ANZ was conscious of the environmental standards it had pledged to follow. The lender's stance is particularly notable given that the pulp mill had already won conditional approval from state and federal environmental regulators.

Although SRI has a long lineage, the sector has surged globally in recent decades as mainstream financiers, such as superannuation funds, have embraced it. The SRI market is particularly pronounced in Australia, as reflected in survey data from the Responsible Investment Association Australasia that suggests 50% of total financial assets managed in Australia in 2014 were tied to some SRI criteria,⁹⁶ a number anticipated to grow as pressure on all Australian financial institutions to invest more responsibly increases. Among recent examples, in 2014 the investment fund of the Australian National University withdrew from seven resource sector companies that it judged had violated ESG criteria. Another is the 2015 refusal of the National Australia Bank to fund the proposed Adani coal mine in Queensland.⁹⁷ Since most businesses at some point rely on bank loans or sale of shares/bonds to sustain their activities, in theory social investors can influence corporations by tying finance to environmental and social considerations.⁹⁸ In other words, SRI can become a means to promote CSR, although there is yet little rigorous empirical research to verify this potential.⁹⁹

93 Peter Dauvergne and Jane Lister, *Eco-Business: A Big-Brand Takeover of Sustainability* (MIT Press, 2013); Jo Confino and John Drummond, 'Why CSR is Not Enough to Create a Sustainable World', *The Guardian* (online) 26 April 2010; Harry Glasbeek, 'The Social Responsibility Movement: The Latest in Maginot Lines to Save Capitalism' (1988) 11 *Dalhousie Law Journal* 363.

94 David Vogel, 'The Limits of the Market for Virtue', *Ethical Corporation* (25 August 2005) <<http://www.ethicalcorp.com/content/limits-market-virtue>>.

95 Peter Kinder, Steven Lydenberg and Ami Domini, *The Social Investment Almanac: A Comprehensive Guide to Socially Responsible Investing* (Henry Holt, 1992); Russell Sparkes, *Socially Responsible Investment: A Global Revolution* (Wiley, 2002); Marcel Jeucken, *Sustainable Finance and Banking: The Financial Sector and the Future of the Planet* (Earthscan, 2001).

96 Responsible Investment Association Australasia (RIAA), *Responsible Investment Benchmark Report* (RIAA, 2015) 4.

97 Australian Broadcasting Corporation, 'NAB the Latest to Rule Out Funding Adani's \$16 Billion Carmichael Coal Mine' (World Today, 3 September 2015).

98 Pietra Rivoli, 'Making a Difference or Making a Statement? Finance Research and Socially Responsible Investment' (2003) 13(3) *Business Ethics Quarterly* 271.

99 See Megan Bowman *Banking on Climate Change* (Wolters Kluwer, 2015); Celine Louche and Tessa Hebb (eds), *Socially Responsible Investment in the 21st Century: Does It Make a Difference for Society?* (Emerald Group Publishing, 2015).

Although it is not feasible to rely on corporate or investor volunteerism as the primary means of improving the environmental performance of Australian businesses, neither is it feasible to rely on governments alone to govern environmental behaviour. The critical question is how to best encourage private sector initiative and innovation without relinquishing the crucial role of government in ensuring environmental integrity in the marketplace. With the right policies and legal instruments, CSR and SRI could acquire a much bigger role in moving the economy towards sustainability.

Already, commentators and researchers have identified some legal reforms that could improve the contribution of CSR or SRI. The seminal Freshfields report of 2005, recognised that the judicial interpretation of the fiduciary and trust law duties of investment funds is an important influence on the scope for SRI,¹⁰⁰ while others see this law as a potential barrier if SRI prioritises ethical criteria over financial returns.¹⁰¹ A legal hindrance to both CSR and SRI is the lack of comprehensive corporate environmental reporting standards, which makes it difficult and more costly for investors and other interested stakeholders to discriminate between environmental laggards and leaders. Corporate governance itself is a barrier to the extent that it hinders shareholders from collaborating, filing resolutions and engaging with corporate managers to exert positive change. One useful reform already adopted in Australia is the *Financial Services Reform Act 2001* (Cth), which obliges the trustees of superannuation funds and some other providers of investment products to disclose whether they have an SRI policy; although the law does not oblige any institution to practice SRI, the effect of the law appears to have greatly increased uptake (at least notionally) of SRI policies.¹⁰² Leadership from public sector funds might also be helpful to facilitate change. In 2010, the Australian Greens party proposed an amendment to the legislation governing the Commonwealth's Future Fund that would have obliged the Fund's trustees to practice SRI, however the proposal was not adopted.¹⁰³ These are just a few examples; commentators have identified a variety of other legal reforms that could facilitate voluntary CSR and SRI practices.¹⁰⁴

The final section of this paper concludes with some specific recommendations for improving the environmental performance of the private sector.

100 Freshfields Bruckhaus Deringer, *A Legal Framework for the Integration of Environmental, Social and Governance Issues into Institutional Investment* (UNEP-FI, 2005).

101 Benjamin J Richardson, *Fiduciary Law and Responsible Investing: In Nature's Trust* (Routledge, 2013).

102 Now embodied in the *Corporations Act 2001* (Cth), s 1013D(1)(l); and see Matthew Haigh and James Guthrie, 'Management Practices in Australasian Ethical Investment Products: A Role for Regulation' (2010) 19(3) *Business Strategy and the Environment* 147, 158-60.

103 *Government Investment Funds Amendment (Ethical Investments) Bill 2011* (Cth).

104 Mia Rahim, *Legal Regulation of Corporate Social Responsibility: A Meta-Regulation* (Springer, 2013); Daniel C Esty and Andrew Winston, *Green to Gold: How Smart Companies Use Environmental Strategy to Innovate, Create Value, and Build Competitive Advantage* (Wiley, 2009).

5. Options for law reform

This *Technical Paper* has identified many aspects of the interface between environmental governance and business law; similarly the range of legal reforms that might be considered to improve the current situation is numerous, however only a handful of the most important ideas for reform are canvassed here. Given the wide variety of reforms needed, some prioritisation will be needed, and business law should encourage corporations to improve their performance beyond the minimal requirements of environmental legislation.

Given that the corporation is the dominant economic actor in Australia, arguably the priority should be reform of the *Corporations Act 2001*. As the legislative framework for corporate governance in Australia, it would assist in obtaining nation-wide uniformity, and thereby help overcome limitations in the mainly state-based environmental legislation. This national approach might also provide flow-on direction to smaller unincorporated enterprises, such as through business supply-chains. Further, including specific environmental standards in the Australian corporations law, would signal to senior managers and directors that these are important responsibilities to address as diligently as other core statutory duties.

It would be worthwhile to introduce a **general duty on all companies to improve their environmental performance**, with such a duty helping to fill gaps in legislative coverage; to address new hazards as they arise; to educate business managers about the importance of environmental sustainability; and to provide businesses with considerable flexibility in determining for themselves how to achieve the best environmental outcomes. A duty of care however, would not be a complete solution. For instance, it would likely be ineffective in addressing small and diffuse cumulative impacts. The duty would also need to be supplemented with regulatory guidance to explain how fulfilment of the duty would go beyond meeting ordinary obligations under environmental legislation, for example, in regard to land use and pollution discharges.

In addition to a duty of care, legal scholars have debated and recommended other mechanisms that may indirectly improve corporate environmental performance.¹⁰⁵ Some options that APEEL recommends are:

- Require all companies to establish an appropriate **environmental management system**, such as one certified by the ISO (International Organisation for Standardisation). This would provide the organisational framework for companies to manage and continually improve their environmental performance, and it could be used to facilitate compliance with environmental legislation.
- Oblige corporations to establish an **environmental sustainability plan** that sets targets and means to achieve ongoing environmental improvements in the business, such as resource use, efficiency gains and waste emission reductions. The plan should set a framework for seeking best environmental practices, beyond minimum legal requirements. Progress in meeting the plan would be disclosed and evaluated in a company's annual report.
- Company law could include an '**environmental judgement rule**',¹⁰⁶ analogous to the business judgment rule. It would shield corporate managers from liability for any perceived failure to promote the best (financial) interests of the company if they make rational investment decisions to improve the company's environmental performance.
- To improve companies' awareness of how their operations may affect the environment, corporations could be obliged **to consult routinely with specified stakeholders**, such as a local community and major environmental organisations, and to explain in their annual reports how consultation occurred and how stakeholders' advice has been taken into account. The mechanisms to achieve such consultation might include a stakeholder consultative forum and a community liaison officer.
- Oblige companies to improve their **collection of environmental performance data, and to disclose it** in their annual reporting processes. Such requirements could complement or enhance voluntary reporting by many

¹⁰⁵ Helen Anderson and Wayne Gumley, 'Corporate Social Responsibility: Legislative Options for Protecting Employees and the Environment' (2008) 29 *Adelaide Law Review* 29; James McConvill and Martin Joy, 'The Interaction of Directors' Duties and Sustainable Development in Australia: Setting Off on the Uncharted Road' (2003) 27(1) *Melbourne University Law Review* 116.

¹⁰⁶ As proposed by McConvill and Joy, above n 105.

businesses that are keen to improve their reputation. While voluntary reporting can help gauge some aspects of corporate environmental performance, it suffers from lack of comparability, lack of consistency and reliability of data.¹⁰⁷ Environmental reporting obligations would not only help regulators to supervise compliance, they would assist social investors to understand companies' environmental performance, and would enable a more informed dialogue on environmental issues within companies and between companies and their stakeholders.

- Environmentally unsustainable practices are often attributable to the short-termism culture in business organisations, and therefore mechanisms could be introduced to encourage more patient, long-term business practices. Such mechanisms could include restructuring the exercise of voting rights of shareholders. Company law could **reward patient shareholders with weighted voting rights**, while excluding from voting those who hold shares acquired through opportunistic borrowing or equity swaps. Such reform would need to be designed cautiously to avoid the entrenchment of reactionary shareholders and barriers to progressive new investors with environmental business reform agendas. Additional incentives, perhaps provided by tax law, should be introduced to align corporate managers' incentives to act for the long term.

All the foregoing obligations would entail additional costs on companies, and therefore some differentiation of responsibilities between large and small companies should be considered in order to reduce the regulatory burden on smaller businesses. The reforms should also include penalties for noncompliance and mandate the Australian Securities and Investments Commission to take enforcement action rather than to burden private persons with such responsibilities.

- Australia should follow the example of Britain, Canada and the United States to give businesses the option of incorporating as a '**corporate hybrid**'.¹⁰⁸ As explained previously, the hybrid blends traditional for-profit and non-profit legal characteristics in their design to support environmentally sustainable and community-oriented practices. Although the obvious limitation of this model is that it leaves untouched mainstream company law, by offering an alternate legal model the corporate hybrid may at least give greater legal confidence to businesses that wish to focus on the environment, as well as to enhance public debate about the limitations of the traditional corporate model. They would serve as a reminder that it is possible to pursue both economic viability and social/environmental responsibility. A business having the status of a 'benefit corporation' or 'community contribution company', as hybrids are known in some jurisdictions, might also confer a marketing advantage with its consumers and traders.

Many of the foregoing reforms would benefit environmental-conscious investors. In addition:

- Mechanisms could be introduced to directly target the financial sector including: **redefine the fiduciary and trust law responsibilities of financial institutions** to allow consideration of the environmental aspects of corporate performance; oblige financiers to publicly report on the environmental impacts and performance of their investment portfolios; and require institutions to commit to approved voluntary SRI codes, such as the United Nations *Principles for Responsible Investing* or the *Equator Principles*; and reform corporate governance to remove impediments to shareholder activism that promotes SRI.
- The Commonwealth should also set an example of best practices in financial investment by **mandating the Future Fund to promote SRI**. Legislation governing sovereign wealth funds in some other jurisdictions, notably in New Zealand and Norway, already provides relevant precedents for Australian reformers to consider. The *Future Fund Act 2006* (Cth) would need to be amended to direct the trustees of the Fund to consider financially material environmental issues, such as climate change, that may affect investment returns.
- Like investors, consumers having the right information and incentives may be able to influence the business community's environmental performance. The most worthwhile reform would be to expand the ACCC regime to include **positive environmental disclosure obligations on businesses**. The ACCC could develop guidelines on the necessary information to disclose (for example, carbon emissions, resources consumption, waste emissions)

¹⁰⁷ Renard Slew, 'Style over Substance: Sustainability Reporting Falling Short' *The Conversation* (23 September 2014).

¹⁰⁸ Carol Liao, 'Disruptive Innovation and the Global Emergence of Hybrid Legal Structures' (2014) 11(2) *European Company Law* 66.

and, crucially, introduce a ranking system that would give consumers the ability to compare the environmental performance of companies' products and services.

- The tax system is a crucial tool for incentivising market actors to improve their environmental performance, as enhanced information disclosures will be insufficient to persuade all investors and consumers to choose the most environmentally responsible options. Instead, an **improvement of the financial advantages of environmentally responsible practices** is required. Useful reforms that should be considered include: reintroduce a national carbon pricing mechanism; remove or reduce tax concessions and subsidies on fossil fuel industries; expand property tax concessions for landowners who engage in nature conservation work; and restructure pricing of utilities to encourage conservation of water and other critical environmental resources.
- Alongside a range of other revenue-raising options that are canvassed in Australian Panel of Experts on Environmental Law, *Environmental Governance* (Technical Paper 2, 2017), it is recommended that **the tax system, including the GST, be reviewed to find opportunities to support greater investment in environmental management**. The money could reward businesses, including farmers, who demonstrate best environmental practices and engage in high quality environmental innovations.

Through the foregoing reforms to incentivise and encourage environmentally responsible practices by corporations and investors, **the business community can help fund and resource the shift to a better system of environmental governance**. Through business-led investments in renewable energy, land care, nature conservation and other environmental initiatives, the business community can help meet the costs of what otherwise are often seen as responsibilities that must be resourced by government agencies or community groups.

Finally, it should be recognised that not all legal reforms to engage the business sector on environmental issues can be restricted to the foregoing business laws. Apart from the traditional corpus of environmental legislation, as analysed in other APEEL *Technical Papers*, the human rights implications of business conduct require additional legal responses that may best be articulated in laws and policies outside conventional business regulations.¹⁰⁹

- Because of the significant human rights dimensions of some business activities that impact the environment, such as displacement of communities, damage to economic livelihoods, and public health impacts, law reform should **give effect to the United Nations Guiding Principles on Business and Human Rights** (UNGPs). Australia declared its support for these *Principles* when it co-sponsored the 2011 Human Rights Council resolution endorsing the UNGPs. One option is a national Human Rights Act, as proposed by various organisations recently, as the means by which Australia could articulate a national action plan on business and human rights.

Such action plans have been adopted or are underway in over 40 countries worldwide. In June 2014, the Australian Government supported a resolution in the Human Rights Council encouraging all states to develop a national action plan or other such framework. One purpose of such a plan and accompanying legislation would be to ensure that all persons whose rights have been violated due to business-related activities, such as pollution or land degradation, have access to a meaningful remedy.¹¹⁰

¹⁰⁹ See Australian Panel of Experts in Environmental Law, *Democracy and the Environment* (Technical Paper 8, 2017).

¹¹⁰ See for example, the recently released Human Rights Law Centre's *Safeguarding Democracy* report <http://hrlc.org.au/wp-content/uploads/2016/02/HRLC_Report_SafeguardingDemocracy_online.pdf>.

APEEL



The Australian Panel of Experts
on Environmental Law

DEMOCRACY AND THE ENVIRONMENT

TECHNICAL PAPER 8

APEEL



The Australian Panel of Experts
on Environmental Law

The principal contributions to this paper were provided by the following APEEL Panel members:

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About APEEL

The Australian Panel of Experts on Environmental Law (APEEL) is comprised of experts with extensive knowledge of, and experience in, environmental law. Its membership includes environmental law practitioners, academics with international standing and a retired judge of the Federal Court. APEEL has developed a blueprint for the next generation of Australian environmental laws with the aim of ensuring a healthy, functioning and resilient environment for generations to come. APEEL's proposals are for environmental laws that are as transparent, efficient, effective and participatory as possible. A series of technical discussion papers focus on the following themes:

1. The foundations of environmental law
2. Environmental governance
3. Terrestrial biodiversity conservation and natural resources management
4. Marine and coastal issues
5. Climate law
6. Energy regulation
7. The private sector, business law and environmental performance
8. Democracy and the environment

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Summary and Recommendations

Executive Summary

Democratic engagement in environmental governance is essential to achieving a healthy flourishing environment which can support both nature, and the health and wellbeing of society. Environmental democracy requires the active engagement of an informed citizenry with the processes of government, but it also includes participation in the governance of environmental commons – the ‘common wealth’ of the Earth, including air, biodiversity, water, ecosystems, and the human cultures and norms that depend on them. In order to reap the benefits the environment provides such as health, culture, prosperity, justice and indeed life, humankind should see itself as trustees of these essential common resources, requiring both engagement and care.

This *Technical Paper* outlines a framework and argument for such a conception of environmental democracy, – and proposes a set of legal and policy approaches that Australia should adopt over the next decade to improve governance of the environmental commons and increase environmental democracy in Australia.

Specific recommendations include:

- 8.1 *Environmental democracy must have as a foundation, respect for fundamental human rights and, in particular, an enforceable right to a clean and healthy environment. This is a standard that needs to extend the piecemeal rights that are currently protected within Australian laws and which are of limited effectiveness. Environmental rights are inspired by international developments, and driven by the desire for legal interventions in the face of environmental injustices and declining environmental conditions.*
- 8.2 *Australia needs improved procedural environmental rights, including rights to information, to public participation, and to accessible and just remedies in circumstances of demonstrated environmental harms and/or breaches of environmental laws. These improvements would extend the effectiveness of environmental protections and facilitate the involvement of communities in advocacy for clean and healthy environments.*
- 8.3 *To achieve realisation of fundamental human rights, there must be better integration of the operation of environmental laws with the exercise of Aboriginal and Torres Strait Islander peoples’ rights and the achievement of justice for Aboriginal peoples. The relationship between Aboriginal peoples’ rights and the environment is a distinctive and unique one, based on ancient but violently disrupted connections to Country. Environmental laws and governance have a role in recognising and advancing those connections. This role should include procedures and practices that contribute to the functioning of free, prior and informed consent by Aboriginal communities in matters that affect them, or their attachments to land and resources, in significant ways.*
- 8.4 *Models of legal personality for the protection of nature should be explored. Rights-based approaches to the protection of ecological integrity can be based on the attachment of the rights of a legal person to natural places or objects directly, such as rivers or threatened species or forests. These are new and emerging approaches to environmental management which Australian jurisdictions should consider implementing.*
- 8.5 *Public integrity mechanisms, such as Environmental Commissioners, should be established to ensure that environmental decision-making is made accountable through appropriate oversight*

of the performance of environmental administration. Weaknesses in environmental laws can often be attributed to inadequate oversight of governance and practice, as much as more glaring problems such as corruption or under-enforcement or the absence of enforceable laws. Integrity institutions can provide tools of 'good practice' or 'best practice' alongside accountability and public scrutiny.

HOW TO CONTRIBUTE TO THE APEEL PROJECT

APEEL invites you to provide your responses to the ideas and recommendations presented in this paper. This will assist the development of our final proposals for the next generation of Australian environmental laws.

We look forward to your engagement on specific reform options as the APEEL journey progresses.

Please send your responses to: admin@apeel.org.au or go to www.apeel.org.au where you can do so online.

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1. Introduction

This *Technical Paper* is concerned with practices and rules associated with environmental democracy in Australia. Democratic participation in environmental governance is necessary because environmental challenges are ongoing, ubiquitous, and often unanticipated. Many key environmental indicators continue to trend downwards.¹ Special objects and places that communities value as part of our natural and cultural heritage need to be protected through good environmental management. In 2010, approximately 21% of the 6.1 million people who volunteered did so for the environment, arts and heritage and animal welfare.²

Strengthening democratic norms and conduct in relation to the environment can be significant in responding to a decline in public confidence in representative democracy,³ and the intensifying inequalities of wealth and social outcomes.⁴ The environment is a source of human benefits, well-being, needs and, indeed, existence. Democracy informs its governance, in the form of rights and obligations, procedures, the distribution of benefits, models of conduct, the representation of 'voices', and the protection of vulnerable subjects both animal and human.

This *Technical Paper* approaches the question of environmental democracy in four ways. First, it looks briefly at theoretical and principled bases for environmental democracy. Then, it considers the right to a safe and healthy environment and a series of procedural rights underpinning environmental justice. Next, it considers two emerging subjects of environmental democracy – Aboriginal and Torres Strait Islander peoples' (Aboriginal peoples') rights in relation to the environment, and the concept of 'rights of nature' or 'wild law' which prioritises an environment-centred law rather than human-centred law. Finally, it looks at how integrity in public practices and institutions is and should be applied to the sphere of environmental governance.

1 State of the Environment 2011 Committee, *Australia State of the Environment 2011 - Independent Report to the Australian Government Minister for Sustainability, Environment, Water, Population and Communities* (DSEWPoC, 2011); Places You Love Alliance, *The Australia We Love: A Report on Key Issues Affecting Nature and Society in Australia* (Places You Love, 2014); Australian Government, Department of Infrastructure and Regional Development (DIRD), *State of Australian Cities 2014–15* (DIRD, 2015).

2 Volunteering Australia, *Key facts and statistics about volunteering in Australia*, (Information Sheet, 16 April 2015).

3 Gareth Griffith, 'Integrity in Government: issues and developments in New South Wales 2011–2015' (Briefing Paper No 1, NSW Parliamentary Research Service, 2015).

4 David Richardson and Richard Denniss, 'Income and Wealth Inequality in Australia' (Policy Brief No 64, The Australia Institute, 2014).

2. Democracy

Contemporary understandings of democracy involve elected, accountable and responsible government, an informed civil society where social groups enjoy equality and non-discrimination, reasonable freedom of communication and association, and checks and balances on power. Citizens exercise sovereignty over political processes through representative institutions, notably Parliaments, to which executive governments are accountable, and through good governance within civil society and the private sector. Political parties have environmental policies and law and policy programs, and many environmental non-government organisations (NGOs) express views about those. Hundreds of NGOs also engage members of the public in activities that range from on-ground environmental works at local and catchment scale to global engagement and advocacy.

Democracy, good governance, the rule of law, and the protection of human rights are foundations of just and sustainable societies. Democracies permit non-violent collective action to effect social, political and economic change, through civil and lawful channels.⁵

Democratic norms now span three generations of rights. First generation human rights protect civil and political freedoms, such as democratic elections and freedoms of speech and association, and equality and non-discrimination.⁶ Second generation human rights are social, economic and cultural rights, such as the right to express national identity, rights to education, housing and a decent living.⁷ Third generation rights, including self-determination and non-discrimination for indigenous peoples and the right to live in a safe and healthy environment, continue to evolve.

2.1 Is there a need for environmental democracy?

Environmental democracy establishes more than a contest over representation and engagement with government. It presupposes engagement with a broader object of human needs and experience – that which might be termed the environmental ‘commons’. ‘Commons’ refers to the ‘public good’ or ‘public interest’ character of environmental systems, objects, places and processes. Many natural and cultural resources have the property of common resources. The ‘commons’ is ‘not merely ‘goods’, but a social practice that generates, uses and preserves common resources and products’.⁸ Biodiversity, water, air, minerals, climate and ecological systems all have the underlying characteristics of the environmental ‘commons’. On a global scale, the atmosphere, outer space, and high seas are each recognised as a distinctive ‘commons’. Places of world heritage are recognised as part of the common heritage of humanity. Juridical and political expression of those commons has ancient as well as modern doctrinal form, including the distinction between the governance of common resources (*res communes* in Roman law) and public or state resources and property (*res publicae*).⁹ One expression of the environmental commons is given in the concept of ‘common pool resources’.¹⁰

The environmental commons are often managed, regulated and, indeed, formally owned by the state or protected by intergovernmental bodies, in a manner akin to a trusteeship,¹¹ for the benefit of the wider society or community.

5 United Nations Human Rights Council (UN HR Council), *Joint report of the Special Rapporteur on the rights to freedom of peaceful assembly and of association and the Special Rapporteur on extrajudicial, summary or arbitrary executions on the proper management of assemblies: note by the Secretariat*, UN Doc A/HRC/31/66 (4 February 2016). See generally John Keane, *The Life and Death of Democracy* (WW Norton & Co, 2009) 849, 853, 855, 860, 864, 867–8.

6 As exemplified in protections under the *International Covenant on Civil and Political Rights*, opened for signature 19 December 1966, 999 UNTS 171 (entered into force 23 March 1976).

7 As exemplified in *International Covenant on Economic, Social and Cultural Rights*, opened for signature 16 December 1966, 993 UNTS 3 (entered into force 3 January 1976).

8 Stefan Meretz, ‘The structural communality of commons’ in David Bollier and Silke Helfrich (eds), *The Wealth of the Commons: A World Beyond Market and State* (The Commons Strategy Group, 2012).

9 This distinction also has been identified in contemporary economic literature, between common-pool resources and public goods: see for example, Elinor Ostrom, ‘Beyond markets and states: polycentric governance of complex economic systems’ (2010) 100 *American Economic Review* 641, 644–5.

10 Although it has been argued that the model of common-pool resources is distinguishable from the commons: Burns Weston and David Bollier, *Green Governance: Ecological Survival, Human Rights, and the Law of the Commons* (Cambridge University Press, 2013) 125–131, where the former is conceived as a form of ‘open access’ regime rather than a model of ‘self-determined norms, practices, and traditions that commoners themselves devise for nurturing and protecting their shared resources’ 125.

11 Ibid 124.

Writing in 1975, the then Chief Justice of Australia, Sir Garfield Barwick articulated a principled analogy of trusteeship over the environment:

In the idealism which trained minds are wont to display, there is room for a very strong sense of the trusteeship or guardianship of the environment, a sense of obligation or duty which, in my view, each generation should feel. If that sense of trusteeship is present, the requirements of conservation will constantly be in mind: and all the restraints for which it calls will more readily be observed. That trusteeship is of a particular and perhaps unusual order, for the trustee has the usufruct of the resources of the country in respect of which on this view it has fiduciary obligations ... It must be conceded at the outset of any such consideration that some use of these resources is a right of each generation, what I have called the usufruct. It may be expected that the permitted extent of that use would reflect the state of development of each generation, and fairly reflect the just needs of that generation. But in the consideration of that extent the overriding fact of trusteeship for the benefit of succeeding generations must ever be a factor.¹²

Common environmental resources are intrinsic to human existence. Equally, they are shaped and modified by human practices and experience. Democratic governance of common resources requires participation and accompanying rules and institutions. In the context of environmental management, this governance may occur through informal or vernacular rules.¹³ But mainly it occurs through formal law, including environmental law, enacted by Parliaments and governments. Representative democracy is important to environmental governance, but participatory democracy is also necessary, especially because of this relationship of trusteeship over the environmental commons. Participation is not solely founded on the idea of the 'social contract' between state and citizen, as in representative democracy, but also involves *trust-like* relationships between those authorities governing environmental resources and the communities and subjects who are the beneficiaries of common environmental resources.

Building on ideas of the beneficial character of the environment, relationships of trust, and best practices of representative democracy, APEEL suggests the next generation of environmental laws should include the following:

- Environmental democracy should be underpinned by a general, broad rights-based framework and, in particular:
 - the right to a safe and healthy environment, and
 - key procedural environmental rights, including the right to information, to public participation and to access to justice in environmental matters.
- The unique circumstances and special attachments of Aboriginal peoples to land and resources require environmental laws to give effect to principles of free, prior and informed consent by Aboriginal communities in matters and actions that affect them.
- Environmental democracy needs to consider further the role and nature of legal frameworks that shift the focus of law from human subjects to those of nature itself. This is the so-called 'rights of nature' or 'wild law' approach to environmental law.
- Environmental democracy should entrench institutions and practices of public integrity. This includes accountability, monitoring, and transparency in environmental performance, decision-making and conduct.

¹² Sir Garfield Barwick, 'Problems in Conservation' (1975) 1 *UNSW Law Journal* 3, 3–4.

¹³ See Weston and Bollier, above n 10.

3. The right to a safe and healthy environment

Law provides form and structure to environmental democracy through protections, controls and enforceable rights, through legal institutions, and through direction and guidance to government, business, communities and citizens. There is a strong and basic connection in democratic societies between democratic practices and legal protections and rights. Those protections and rights are embedded in the law through constitutional arrangements, legislation, and judge-made (common) law. Precisely what protections and rights exist and how the law gives expression and protection to them will vary across countries and jurisdictions. Because of the basic role of legal protections and rights in democratic society, APEEL proposes that environmental rights should be a foundation for environmental democracy. The first of these rights proposed is the right to a safe and healthy environment. APEEL recommends that this right should be incorporated into the next generation of environmental laws.

3.1 Environmental rights may be protective or restorative

Environmental rights may be protective in nature. For example, the law of private nuisance (a tort) has long protected individuals from pollution or harmful emanations from neighbouring property where they are of a nature likely to impair that individual's enjoyment of their property. Statutory pollution control laws provide wider public interest protection against the contamination of air, water and land. Conservation laws, such as those creating national parks or managing threatened species, have been enacted to protect biodiversity for the broad public good.

Environmental rights may also be restorative, such as those aimed at conservation and improvement of environmental conditions or the restoration of ecological functions. For example, water laws imposing limits on water extraction and new models of environmental water entitlements establish restorative rights for 'the environment'.

3.2 International law: an important source of norms underpinning the right to a clean and healthy environment

International law and society are important sources of environmental and democratic norms, informing national experiences, including in Australia. Currently more than 280 multilateral environmental agreements (MEAs) are dedicated to environmental protection.¹⁴ Other areas of international law, including multilateral trade agreements and the *United Nations Convention on the Law of the Sea*, are also relevant.

Since the *Universal Declaration of Human Rights* (UDHR) was adopted in 1948, the right to life and a standard of living adequate for personal and family well-being, and access to justice to protect recognised rights, has been part of international law.¹⁵

The concept of rights and responsibilities in relation to a healthy environment, a 'third generation' development, was recognised nearly 45 years ago at the first global environmental conference in June 1972, in the '*Stockholm Declaration*':

Man [sic] has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being, and he bears a solemn responsibility to protect and improve the environment for present and future generations.¹⁶

¹⁴ Achim Steiner and Mikhel Oviir, 'Foreword' in United Nations Environment Programme (UNEP) Division of Environmental Law and Conventions, *Auditing the Implementation of Multilateral Environmental Agreements (MEAs): A Primer for Auditors* (UNEP, 2010), iii.

¹⁵ *Universal Declaration of Human Rights*, GA Res 217A (III), UN Doc A/810 (10 December 1948) arts 3, 8, 25(1).

¹⁶ United Nations Conference on the Human Environment, *Report of the United National Conference on the Human Environment: Declaration of the United Nations Conference on the Human Environment (Stockholm Declaration)*, UN Doc. A/Conf.48/14/Rev.1 (16 June 1972) Principle 1.

This principle has been recognised in the judgments of eminent international jurists,¹⁷ and in several regional instruments.¹⁸ The current United Nations (UN) Special Rapporteur on Human Rights and the Environment, John Knox, has affirmed that states are obliged under international human rights law to take reasonable and justifiable measures to protect environment-related human rights, acknowledging that ‘environmental degradation can and does adversely affect the enjoyment of a broad range of human rights’.¹⁹ When Knox was the Independent Expert on Human Rights and the Environment, he produced several overview reports on environmental rights.²⁰ This continues an initiative that the UN member states did not progress in the 1990s, despite a promising start,²¹ but returned to in the 2000s.

Other UN initiatives also relate to environmental rights,²² including the 2011 Human Rights Council’s endorsement of the *Guiding Principles on Business and Human Rights*,²³ General Assembly and Security Council resolutions on environmental rights, global security and climate change,²⁴ and rights-based approaches to the implementation of the *World Heritage Convention*.²⁵

The proposed *United Nations Declaration on Climate Change and Human Rights*²⁶ is an initiative that may gain traction given states’ shared responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other states or areas beyond national borders.²⁷ This proposed *Declaration* would recognise that environmental duties extend to protection against harm caused by private actors and harm in a transboundary context.²⁸

Procedural rights have long been recognised in international law such as rights to participate in matters of national affairs. These can be beneficial for the environment. Other ways of expressing environmental protections and conservation have been recognised in international law. For instance, environmental protection for current and future generations is recognised as a common concern for humanity.²⁹ States and non-state actors have a responsibility to work with others in the international system in accordance with common, but differentiated responsibilities to conserve, protect and restore the health and integrity of the Earth’s ecosystems.³⁰ These developments are indicative of a strong momentum toward a human rights approach to environmental matters at the international level.

17 See for example, *Gabčíkovo-Nagymaros Project (Hungary v Slovakia)* (Danube Dam Case) (Judgment) [1997] ICJ Rep 7 (Separate Opinion of Vice-President Weeramantry):

‘The protection of the environment is ... a vital part of contemporary human rights doctrine, for it is a sine qua non for numerous human rights such as the right to health and the right to life itself. It is scarcely necessary to elaborate on this, as damage to the environment can impair and undermine all the human rights spoken of in the Universal Declaration and other human rights instruments. While, therefore, all peoples have the right to initiate development projects and enjoy their benefits, there is likewise a duty to ensure that those projects do not significantly damage the environment’.

18 *African Charter on Human and Peoples’ Rights (Banjul Charter)*, adopted 27 June 1981, 1520 UNTS 217 (entered into force 21 October 1986); *Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights*, adopted 17 November 1988, (1988) OASTS 69 (entered into force 16 November 1999); Association of Southeast Asian Nations (ASEAN) Secretariat, *Human Rights Declaration* (ASEAN, 18 November 2012).

19 UN HR Council, *Report of the Independent Expert on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment*, John H Knox, *Mapping Report*, UN Doc A/HRC/25/53 (30 December 2013) [17], [79]–[80].

20 UN HR Council, *Human Rights and the Environment*, Res 28/11, UN Doc A/HRC/28/L.19 (26 March 2015); UN HR Council, *Report of the Independent Expert on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment*, John H Knox, *Preliminary Report*, UN Doc A/HRC/22/43 (24 December 2012); UN HR Council, *Report of the Independent Expert on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment*, John H Knox: *Compilation of Good Practices*, UN Doc A/HRC/28/61 (3 February 2015).

21 United Nations, Economic and Social Council Commission on Human Rights, *Review of Further Developments in Fields with which the Sub-Commission has been Concerned: Human Rights and the Environment: Final Report prepared by Mrs Fatma Zohra Ksentini, Special Rapporteur*, UN Doc E/CN.4/Sub.2/1994/9 and Corr.1 (6 July 1994).

22 See for example, UNEP, *High Level Expert Meeting on the New Future of Human Rights and Environment*, Nairobi 2009; UN HR Council, *Analytical Study on the Relationship between Human Rights and the Environment*, Report of the United Nations Commissioner for Human Rights, UN Doc A/HRC/19/34 (16 December 2011).

23 United Nations Office of the High Commissioner for Human Rights, *Guiding Principles on Business and Human Rights: Implementing the United Nations ‘Protect, Respect and Remedy’ Framework* (UN, 2011).

24 C Werrell and F Femia, ‘Climate Change as a Threat Multiplier for Global Security’ on The Centre for Climate and Security, *Climate and Security* (8 July 2015) <<https://climateandsecurity.org/2015/07/08/un-security-council-meeting-on-climate-change-as-a-threat-multiplier-for-global-security/>>.

25 See for example, United Nations Educational, Scientific and Cultural Organisation (UNESCO) World Heritage Committee, *World Heritage and Sustainable Development*, Doc WHC-15/39.COM/5D (15 May 2015); International Union for Conservation of Nature, International Council on Monuments and Sites International Centre for Study of the Preservation and Restoration of Cultural Property, *World Heritage and Rights-based Approaches* (Norwegian Ministry of Climate and Environment, 2014).

26 The Global Network for the Study of Human Rights and the Environment (GNHRE) released a ‘Draft Declaration on Human Rights and Climate Change’ in November 2014, and the ‘Declaration’ in June 2016; GNHRE, *Declaration on Human Rights and Climate Change* <<http://gnhre.org/declaration-human-rights-climate-change/>>.

27 *Trail Smelter Arbitration (United States v Canada)* (1938 and 1941) 3 UN Reports of International Arbitral Awards 1905.

28 UN HR Council, *Report of the Independent Expert on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment* UN Doc A/HRC/25/53, above n 19 [58]–[68].

29 *Stockholm Declaration*, above n 16; *UNESCO Declaration on the Responsibilities of the Present Generations toward Future Generations*, UNESCO Res (12 November 1997) 69–71.

30 United Nations General Assembly, *Rio Declaration on Environment and Development*, UN Doc A/CONF.151/26 (Vol I) and Annex I (14 June 1992) principle 7; *Convention on Biological Diversity*, opened for signature 5 June 1992 1760 UNTS 79 (entered into force 29 December 1993) art 6; *United Nations Convention to Combat Desertification in Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa*, 33 ILM 1328 (17 June 1994) arts 4–6; *United Nations Framework Convention on Climate Change (UNFCCC)*, opened for signature 09 May 1992, 1771 UNTS 107 (entered into force 21 March 1994) art 4.

3.3 Environmental rights and protections have various legal sources

As indicated above, the sources of environmental rights can be found in a number of legal forms, and this will vary across jurisdictions.

3.3.1 Common law

In Australia, the common law provides an important backdrop and context for protective environmental rights. This is to be found, in particular, in private rights available to relieve or remedy harms caused by environmentally damaging activities. The law of torts, including actions in the form of nuisance, trespass and negligence, is important in this regard. Judicial review, non-statutory administrative law, the common law of standing, rules of statutory interpretation and the early common law recognition of native title are also essential aspects of environmental law.

3.3.2 Legislation

As significant as the common law is to the fabric of Australian law in general, the main influence of law on environmental governance is through legislation.

Federal statutes have established environmental protections since at least the 1970s, and there are currently more than 70 federal Acts dealing with environmental matters, ranging from biodiversity conservation, fisheries and nuclear actions to quarantine, climate change and water management.³¹ Few of these laws are framed as laws providing expressly for environmental rights, or more precisely, environmental benefits as human rights. Rather than taking a rights-based approach, most environmental legislation manages harmful activities³² and resources in a manner that considers principles of ecological sustainability,³³ or, in the case of environmental financing legislation, establishes programs aimed at environmental repair.³⁴ Consistent with the norms of ecologically sustainable development (ESD), the emphasis in environmental law is more on qualifying or controlling development and the use of resources.³⁵

The prevailing approach in Australian environmental law is not to focus on rights directly, but to impose duties and obligations, whether in the form of duties on public authorities to regulate activities, duties on individuals or corporations not to cause harm, or duties to undertake particular activities in accordance with environmental rules or norms.³⁶ Rights are a part of this approach – such as the right to enforce such duties – but they tend to be ancillary to the imposition of duties and the language of human rights is not dominant. In some Australian jurisdictions, environmental laws establish wider, general environmental duties,³⁷ with provisions for enforcement alongside those duties, but even in Victoria and the ACT with rights charters in place, the right to a safe and healthy environment is not recognised expressly.³⁸

Australia has ratified the seven main global international human rights Conventions and partially discharges its obligations in domestic law through a range of Acts, administrative practices and overlapping scrutiny mechanisms.³⁹ Australia is accountable to international treaty bodies for its human rights implementation. There has been extensive

31 See Australian Panel of Experts on Environmental Law, *Environmental Governance* (Technical Paper 2, 2017).

32 See for example, *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act); *Ozone Protection and Synthetic Greenhouse Gases Management Act 1989* (Cth); *Environmental Protection (Sea Dumping) Act 1984* (Cth).

33 See for example, *Water Act 2007* (Cth); *Fisheries Act 1991* (Cth); *Regional Forests Agreement Act 2002* (Cth).

34 See for example, *Natural Heritage Trust of Australia Act 1997* (Cth).

35 For a detailed discussion of the ESD concept and its limitations, see Australian Panel of Experts on Environmental Law, *The Foundations of Environmental Law: Goals, Objects, Principles and Norms* (Technical Paper 1, 2017).

36 For proposals regarding appropriate environmental duties of a general nature, see Australian Panel of Experts on Environmental Law, *The Foundations of Environmental Law: Goals, Objects, Principles and Norms* (Technical Paper 1, 2017) and see Australian Panel of Experts on Environmental Law, *The Private Sector, Business Law and Environmental Performance* (Technical Paper 7, 2017).

37 See for example, *Environmental Protection Act 1994* (Qld) s 319.

38 Hanna Jaireth, 'Human rights cities – how does Australia fare?' (2015) 20 *Local Government Law Journal* 240, 248–50.

39 For a recent overview see Australian Law Reform Commission (ALRC), *Traditional Rights and Freedoms – Encroachments by Commonwealth Laws*, (ALRC Interim Report 127, Sydney, 2015) ch 2; Federal implementing laws include the *Human Rights (Parliamentary Scrutiny) Act 2011* (Cth), *Australian Human Rights Commission Act 1986* (Cth), and *Native Title Act 1993* (Cth).

debate around further implementation of human rights in Australian domestic law.⁴⁰ This has included consideration of recommendations by official bodies regarding environmental rights and basic economic and social rights related to environmental rights. However, broad-based rights for environmental protection, health and integrity, deriving from a human rights approach, have not been incorporated within the body of Australian law.

Establishing a general right to a clean and healthy environment in national law would serve a number of purposes. It would strengthen environmental law generally; it would provide an environmental safety net; it would facilitate improved environmental accountability and performance; it would help prevent rollback in environmental protections; and it would help to level the playing field of competing environmental and economic considerations.

There is evidence that the positive legal expression of environmental rights does contribute to better environmental outcomes than where those rights are absent.⁴¹

APEEL's view is that the right to a clean and healthy environment should give rise to an enforceable cause of action. A starting point might be the model of the 1993 *Environmental Bill of Rights* in Ontario Canada. There an actionable right arises in relation to causing (or imminently causing) significant harm to a 'public resource'. A public resource includes air, public waterways, unimproved public land, and public land used for various public purposes if larger than five hectares, and associated plants, animals and ecological systems.⁴²

The apparent reluctance in Australia to enact broad-based rights protections, such as a 'Bill of Rights' or 'Charter of Rights and Freedoms', should not necessarily deter the pursuit of environmental rights protections. The common law protects some rights, and broader human rights protections have been enacted in Victoria and the ACT. Further, environmental rights can be conceived as positive expressions of environmental duties, now well-established.

3.3.3 Constitutional law

A right to a safe and healthy environment has been recognised in more than 90 national constitutions.⁴³ The *Australian Constitution* provides some democratic safeguards for citizens engaging with environmental issues such as representative and accountable institutions. But there are no express constitutional protections for the environment or environmental rights. Federal constitutional power for the Australian Parliament to legislate on environmental matters has derived from powers to make law on matters such as external affairs, corporations and foreign trade.

In 2009, the National Human Rights Consultation recommended that a new national Human Rights Act create rights of action for breaches of civil and political rights initially, with non-justiciable protection for several economic and social rights. This led to a strengthened *Human Rights Framework*.⁴⁴ These initiatives have not led to sustained campaigns for constitutional reform. During the National Consultation, 15 focus groups recommended that basic amenities, essential healthcare, and equitable access to just and personal safety be included as unconditionally protected rights.⁴⁵ This outcome is suggestive of popular support for human rights protections consistent with a broad right to a safe and healthy environment.

In Australia, national constitutional reform is very difficult to achieve. Constraints on change include 'double majority' requirements for constitutional amendment.⁴⁶ Constitutional adoption of a right to a clean and healthy environment is unlikely to be a preferred or likely approach.

40 The National Human Rights Consultation recommended in 2009 that a new national Human Rights Act create rights of action for breaches of civil and political rights initially, with non-justiciable protection for several economic and social rights. The Australian Government did not accept this recommendation, but did agree that the Executive would introduce statements of human rights compatibility when introducing Bills to the Parliament, introduce a program of human rights education, and establish a Parliamentary committee on human rights. That committee became the Parliamentary Joint Committee on Human Rights (PJCHR), which has raised environmental rights questions.

41 David Boyd, *The Environmental Rights Revolution: A Global Study of Constitutions, Human Rights and the Environment* (UBC Press, 2012); Chris Jeffords and Lanse Minkler 'Do constitutions matter? The effects of constitutional environmental rights provisions on environmental outcomes' (2016) 69 *Kyklos* 2, 294.

42 *Environmental Bill of Rights*, SO 1993, c 28, ss 82, 84.

43 David Boyd, 'The Constitutional Right to Healthy Environment' (2012) (June-July) *Environment Magazine* <www.environmentmagazine.org/Archives/Back%20Issues/2012/July-August%202012/constitutional-rights-full.html>.

44 Commonwealth of Australia *Australia's Human Rights Framework* (2010), <https://www.ag.gov.au/Consultations/Documents/Publicsubmissionsonthedraftbaselinestudy/AustraliasHumanRightsFramework.pdf>; see also, for example, *Human Rights (Parliamentary Scrutiny) Act 2011* (Cth).

45 Frank Brennan SJ AO, *The Practical Outcomes of the National Human Rights Consultation* (Address to Judicial Conference of Australia Colloquium, Sir Stamford, Circular Quay, Sydney, 12 October 2013) 3.

46 *Australian Constitution* s 128.

3.4 Recommendations on a national right to a safe and healthy environment

Australia's mosaic of environmental laws creates obligations to refrain from causing harm to the environment, and to act in a manner that mitigates harm. In the international sphere, conduct and debate has moved increasingly toward the establishment of rights-based environmental norms and approaches.

The Panel recommends that the next generation of Australian environmental laws include the right to a safe and healthy environment. This would preferably be contained in national human rights legislation, but may alternatively be contained within national environmental legislation. It would establish an underpinning legal norm under Australian federal law, providing a legal baseline broadly consistent with protections in most other liberal democracies.⁴⁷ The right should encompass protection of the environment for present and future generations. The right should give rise to an enforceable cause of action.

As noted above, APEEL supports, as a starting point, the model of the 1993 *Environmental Bill of Rights* in Ontario, Canada.⁴⁸ Under the Ontario statute, an actionable right arises in relation to causing (or imminently causing) significant harm to a public resource.⁴⁹ Yet the right to a safe and healthy environment should also be informed by the important work undertaken by the UN Human Rights Council's Special Rapporteur on Human Rights and Environment, who has taken the position that the right refers to (state) obligations to protect against, and respond to, environmental harm interfering with the enjoyment of human rights.⁵⁰ Informed by the Special Rapporteur's approach, 'heightened duties' and hence special consideration of the right would apply to vulnerable groups, such as women, children and indigenous communities.⁵¹ The right would extend to protection against harm caused by private actors and harm in a transboundary context.⁵²

A principal rationale for establishing an enforceable right to a safe and healthy environment is that it elaborates other basic human rights protections, such as the right to life, health, and culture under the main human rights instruments. To put this another way, it is derivative of those basic rights. In several cases overseas, environmental harm has been found to have violated the right to life, for example, in *Yanomami v Brazil*⁵³ concerning an indigenous community's rights to life and health, *Oneryildiz v Turkey*⁵⁴ concerning the right to life of slum-dwellers living near a rubbish tip, *Lopez Ostra v Spain*⁵⁵ concerning pollution from a waste-treatment plant, and in *Guerra*⁵⁶ where the right to private and family life was held to be violated by local authorities' failure to contain chemical plant pollution.

The right to a safe and healthy environment might be said to be analogous to the right to a safe and healthy workplace under labour law. It also establishes a standard in conformity with ideas of environmental prudence in the face of powerful anthropogenic forces.⁵⁷

47 Consistency in this respect would not necessarily include parity of legal status of such a right under Australian law, where, for example, other states have adopted rights-based environmental protections under constitutional or 'basic' national laws. Where such rights do exist in other states' national constitutions they are likely to be accompanied by procedural protections against removal, such as super-majority requirements for constitutional amendment. Should Australia adopt rights-based environmental protection it is, as suggested here, likely to be contained in ordinary statute law.

48 *Environmental Bill of Rights*, SO 1993, c 28.

49 The concept of a 'public resource' under the *Environmental Bill of Rights* is analogous to 'environmental commons' or 'public goods' and includes air, public waterways, unimproved public land, and public land used for various public purposes if larger than 5 hectares, and associated plants, animals and ecological systems: *Environmental Bill of Rights*, SO 1993, c 28, s 82. A right of action is established – s 84.

50 UN HR Council, *Report of the Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment*, UN Doc A/HRC/31/52, (1 February 2016) [65]–[67] and UN Doc A/HRC/34/49, 19 January 2017. The title and status of the 'Independent Expert' was changed to that of a Special Rapporteur in 2015 by Resolution of the Human Rights Council.

51 UN HR Council, *Report of the Independent Expert on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment* UN Doc A/HRC/25/53 above n 19 [69]–[78].

52 *Ibid* [58]–[68].

53 (Inter-American Commission on Human Rights) Case 7615 (Brazil) OAE/Ser.L/VII.66 Doc 10, rev.1 (1985).

54 (48939/99) [2002] ECHR 491.

55 [1995] 20 EHRR 277.

56 [1998] 26 EHRR 357.

57 Johan Rockström, Will Steffen, Kevin Noone, Åsa Persson, F Stuart Chapin, III, Eric F Lambin, Timothy M Lenton, Marten Scheffer, Carl Folke, Hans Joachim Schellnhuber, Björn Nykvist, Cynthia A de Wit, Terry Hughes, Sander van der Leeuw, Henning Rodhe, Sverker Sörlin, Peter K Snyder, Robert Costanza, Uno Svedin, Malin Falkenmark, Louise Karlberg Robert W. Corell, Victoria J Fabry, James Hansen, Brian Walker, Diana Liverman, Katherine Richardson, Paul Crutzen and Jonathan A Foley, 'A safe operating space for humanity' (2009) 461 *Nature* 472.

4. Procedural rights of environmental democracy

Procedural environmental rights – to information, public participation and justice – enable the benefit or protection of more substantive human rights to be exercised and realised. Procedural rights are a crucial conduit between environmental protections and democratic experience – such as in providing the tools for enforcement of environmental protections and to participate in decision-making. Indeed, one dimension of the right to a safe and healthy environment is having access to functional tools for protecting against environmental harm.⁵⁸

Procedural, process-based rights are basic to participation. For environmental law, these include the right of the public to be informed, to participate in environmental decision-making processes, to express political opinions and enjoy freedom of association, and to access means of redress and dispute resolution. Each of these dimensions corresponds to the key ‘pillars’ of the *Aarhus Convention*.⁵⁹ That *Convention* gives effect to Principle 10 of the *Rio Declaration on Environment and Development*.

Although a European-based instrument, the *Aarhus Convention* contains principles and rules appropriate to Australian circumstances. In a comparative light, Australia’s performance at the national level is patchy.⁶⁰

The ‘pillars’ of the *Aarhus Convention* – access to information, public participation, and access to justice – represent a valuable model and standard against which Australian environmental law can be evaluated. Detailed guidance on the *Convention* can be found in *The Aarhus Convention: An Implementation Guide*.⁶¹ The *Ontario Environmental Bill of Rights* is an earlier legislative instrument also addressing these pillars and, as such, is instructive from a procedural rights perspective. The *Environmental Bill of Rights*⁶² provides the right to:

- comment on environmentally significant government proposals;
- ask a ministry to review an existing law, or the need for a new one;
- ask a ministry to investigate harm to the environment;
- seek permission to appeal a ministry decision on permit, approval or other instrument;
- use courts or tribunals to protect the environment; and
- whistle-blower protection.

4.1 Access to information

To participate effectively in environmental affairs, information about the environment held by public and private authorities must be accessible in an open and transparent way. Freedom of Information (FoI) laws are only a starting point.⁶³ Administration of FoI legislation generally is under-resourced, resulting in delays and expenses for applicants.⁶⁴

⁵⁸ See UN HR Council, *John H Knox: Preliminary Report*, [UN Doc A/HRC/22/43](#) above n 20, [17]; Weston and Bollier, above n 10, 33–34; The Preamble to the *Aarhus Convention* states that its procedural standards are guided by the right of ‘every person... to live in an environment adequate to his or her health and well-being, and the duty, both individually and in association with others, to protect and improve the environment for the benefit of present and future generations’.

⁵⁹ *Convention on Access to Information, Public Participation in Decision-Making, and Access to Justice in Environmental Matters (Aarhus Convention)*, adopted 25 June 1998, 2161 UNTS 447 (entered into force 30 October 2001).

⁶⁰ Guy Dwyer, Judith Preston, Frances O’Brien, Luke Salem, Rachel McNally, Erin Turner-Manners and Jennika Woerde, *Environmental Democracy Index: Australia* <<http://www.environmentaldemocracyindex.org/>>; Victoria Lambropoulos, ‘What can Australia learn from the Europeans about public participation? Article 6 of the Aarhus Convention and environmental impact statements’ (2010) 27 *Environmental and Planning Law Journal* 4, 272.

⁶¹ United Nations Economic Commission for Europe, *The Aarhus Convention: An Implementation Guide* (2014 2nd ed) <http://www.unece.org/fileadmin/DAM/env/pp/Publications/Aarhus_Implementation_Guide_interactive_eng.pdf>; see also Zen Makuch *Guidance Note on the Aarhus Convention for the General Public, NGOs and Local Councils* (Malta Environment & Planning Authority, 2009). This Note explains how to implement the Convention in respect of land use planning matters in Malta.

⁶² *Environmental Bill of Rights*, SO 1993, c 28.

⁶³ Australian Government agencies subject to the *Freedom of Information Act 1982* (FoI Act) are required to publish a range of information on their websites as part of the Information Publication Scheme (IPS): Office of the Australian Information Commissioner (OAIC), *Our Information Publication Scheme* <www.oaic.gov.au/about-us/access-our-information/our-information-publication-scheme>.

⁶⁴ In 2014–15 the Department of the Environment received 98 requests under the FoI Act; 17 involved notification of charge; \$14,772 was notified and \$6,913 collected. See Office of the Australian Information Commissioner, *Annual Report 2014-15: Chapter Eight - Agency freedom of information* (2015) <www.oaic.gov.au/about-us/corporate-information/annual-reports/oaic-annual-report-201415/chapter-eight-agency-freedom-of-information>.

Further, FoI only applies to government, it has exceptions and complexities, and its independent administration has been progressively weakened.⁶⁵

There are a range of frameworks, reporting regimes, and systems in place (both at national and sub-national levels), in relation to matters such as pollutants, greenhouse gas emissions, biodiversity assessments and impacts, and water resources management. Various tools for information provision are used, including databases (online or otherwise), registries, and periodic reporting. Additionally, at the national policy level, Australia has produced *National Principles for Environmental Information*⁶⁶ and a review of environmental information management occurred in 2012.⁶⁷ Mechanisms such as the *National Pollutant Inventory* have arguably commenced the task of a 'fully integrated environmental information system'.⁶⁸ This type of architecture is practically important and necessary to the functioning of access to information as a procedural right.

In some circumstances, public provision of information, such as public notices concerning environmental assessments under federal laws, is well managed.⁶⁹ Under Australia's intergovernmental water management arrangements, extensive work has been undertaken on developing water information systems, such as registries, water accounts and assessments.⁷⁰ Australia also undertakes periodic 'state of the environment' reporting at national and state levels.

A positive development is the Australian Government's commitment that Australia will participate in the global Open Government Partnership (OGP) and engage civil society in the development of an *Open Government National Action Plan* (NAP),⁷¹ although this initiative does not yet appear to be linked to greater private sector disclosure. A significant amount of important environmental information is acquired and held by the private sector. In certain fields, such as pollution management and greenhouse gas emissions regulation, there are duties on the private sector to provide environmental information, but this is the exception rather than the rule.⁷²

4.1.1 Conclusions and recommendations

A positive duty on the Australian Government to collect and publish information, facilitate public access and use of it, and maintain appropriate infrastructure to manage this duty is consistent with the *Aarhus* principles. This duty implies a rigorous obligation on the part of government to monitor, analyse and report on environmental matters that fall within the functions of government or of particular government agencies.⁷³

Establishing a regime for the collection and dissemination of environmental information should occur over and above reform of FoI laws, where this reform can also contribute to the greater availability and accessibility of environmental information. Initiatives aimed at harmonising FoI legislation nationally, in particular reducing complexity and exceptions and expanding scope for disclosure in the public interest, would be consistent with a more open and transparent approach to the collection and provision of environmental information. Shifting the policy approach of FoI laws more robustly and uniformly toward proactive disclosure – or a so-called 'push' approach – would also be consistent with improved practices in managing environmental information. The *Freedom of Information Act* 2016

65 Richard Mulgan, 'The slow death of the Office of the Australian Information Commissioner', *The Canberra Times*, (Australia), 1 September 2015.

66 Australian Government, *National Principles for Environmental Information* (2015) <www.environment.gov.au/system/files/resources/d78e712c-6d80-417f-b482-77b0c4ed9a22/files/national-principles-environmental-information.pdf>.

67 Stephen Morton and Anthea Tinney, *Independent Review of Australian Government Environmental Information Activity: Final Report* (DSEWPac, 2012) <www.environment.gov.au/system/files/resources/06e5e5b5-4584-4bd9-b2fd-05a790d0b2c4/files/eia-review-final-report.pdf>.

68 Ibid, xi; See Department of Environment and Energy, *National Pollutant Inventory* <www.npi.gov.au> and *National Environment Protection (National Pollutant Inventory) Measure 1998* (Cth).

69 See for example, Department of the Environment and Energy, *Public notices and invitation to comment* <www.environment.gov.au/epbc/public-notices>.

70 The Commonwealth Bureau of Meteorology has been important in improved programs for the collection and dissemination of information regarding water resources and might represent a model in this respect: see Bureau of Meteorology, *Improving Water Information* (Australian Government) <<http://www.bom.gov.au/water/>>.

71 This National Action Plan is expected to be completed by November 2016: Department of the Prime Minister and Cabinet, *Open Government Partnership – Australia* (Australian Government) <<http://ogpau.pmc.gov.au/>>. Some of the modest initiatives that Australian Government agencies have proposed under the OGP include, for example, a centralised annual report discovery portal, a digital marketplace, more data-driven digital report publishing, an ICT Project dashboard, the redesign of the open data request process, and transforming high volume services.

72 See for example, *National Greenhouse Gas and Energy Reporting Act 2007* (Cth); see also Australian Panel of Experts on Environmental Law, *The Private Sector, Business Law and Environmental Performance* (Technical Paper 7, 2017).

73 For an example of the interactions between environmental information and public participation in the case of managing toxic waste, see Karen Bubna-Litic and Marianne Lloyd-Smith 'The role of public participation in the disposal of HCBs – an Australian case study' (2004) 21 *Environmental and Planning Law Journal* 264.

(ACT) provides a state-of-the-art model for best-practice FoI legislation, consistent with this ‘push’ model and strong positive obligations to provide information publicly.⁷⁴

The aims of the OGP and engagement of business and civil society in greater transparency are welcome. It is consistent with international initiatives such as the *Guidelines on Business and Human Rights*.⁷⁵ Proposals to make information more accessible on portals are also to be welcomed. A ‘one-stop-shop’ for environmental information is not yet in place. If information is made easily accessible through a central registry, portal or online source that hosts information from multiple portfolios and international comparative information about similar projects and applicable regulatory frameworks, this would improve public trust, responsibility and accountability, and reduce the risks of corruption and human rights violations that often include environmental dimensions.

APEEL recommends:

- All public authorities progressively make available to the public by electronic means all environmental information that they hold, and take reasonable steps to organise the information relevant to its functions with a view to the active and systematic dissemination to the public of the information.⁷⁶
- Clear national measures or standards in legal form are established requiring the proactive collection and dissemination of environmental information, its acquisition from public and private sources, and expedient measures for the request of environmental information. All other things being equal, environmental information falling within this scope should include:
 - information relevant to the functioning of public authorities and
 - information reasonably necessary to the management of current and future environmental issues.⁷⁷

4.2 Public participation and deliberative democracy

Public participation in decision-making about environmental matters refers to participation, individually or through organised or representative bodies, in decision-making processes, whether at the formative or implementation stages. This may occur at the level of individual projects, developments, or activities. It may concern decision-making about plans, programs and policies. It may concern participation in the making of regulatory instruments.⁷⁸

Common techniques of deliberative environmental governance are at the lower impact end of the public participation spectrum. These include consultation processes, which may be mandated in relevant environmental or natural resources legislation, especially at the planning or investigation stages of management. There are circumstances in which community or civil society groups will be involved in consultation and deliberation over extended timeframes through advisory or stakeholder bodies. Some of these ongoing participatory arrangements are required or established by law, such as high level consultative committees intended to bring together key interest groups.⁷⁹ Other arrangements are *ad hoc* or discretionary on the part of public agencies. While there is an extensive body of theory on public participation in governance or public administration,⁸⁰ public participation in environmental matters can be classified as falling generally into three categories:

- A ‘notice and comment’ type of procedure, through which citizens are made aware of the relevant issues and are provided with information and given opportunity to make submissions on them.

⁷⁴ Australian Capital Territory Legislative Assembly, Shane Rattenbury MLA, *Freedom of Information Bill 2016*, introduced 5 May 2016 <http://www.legislation.act.gov.au/b/db_53833/default.asp>. The Act commences 1 July 2017.

⁷⁵ UN HR Council, *Report of the Special Representative of the Secretary-General on the issue of human rights and transnational corporations and other business enterprises*, John Ruggie: *Guiding Principles on Business and Human Rights, Implementing the United Nations ‘Protect, Respect and Remedy’ Framework*, UN Doc A/HRC/17/31 (21 March 2011).

⁷⁶ See *Environmental Information Regulations 2004* (UK) SI 2004/3391, reg 4(1).

⁷⁷ This particular issue is also addressed in Australian Panel of Experts on Environmental Law, *Environmental Governance* (Technical Paper 2, 2017).

⁷⁸ See for example, *Convention on Access to Information, Public Participation in Decision-Making, and Access to Justice in Environmental Matters*, adopted 25 June 1998, 2161 UNTS 447 (entered into force 30 October 2001), arts 6, 7, and 8 respectively.

⁷⁹ See for example, the Basin Community Committee established as an advisory body under the *Water Act 2007* (Cth) s 202.

⁸⁰ See generally Mark Reed, ‘Stakeholder management for environmental participation: a literature review’ (2008) 141 *Biological Conservation* 2417; Andrew Cornwall, ‘Unpacking “participation”: models, meanings and practices’ (2008) 41 *Community Development Journal* 3 269.

- A *public inquiry* model of procedure, through which citizens can provide written comments or submissions, and may make oral submissions and/or call and test evidence in a hearing.
- A *deliberative* procedure, through which citizens and interested actors debate and even negotiate or decide on environmental matters.

The distribution of decision-making power and control to citizens and communities can vary considerably across all categories.⁸¹ These categories are not necessarily exhaustive, but represent broad models of policy tools for citizen-state engagement on environmental questions.

4.2.1 'Notice and comment' consultation

Government and public agencies commonly consult on plans, policies, programs and regulations. Many environmental laws, as well as other laws impacting on the environment (from mining laws to transport), include requirements for officials to provide notice of the preparation of such instruments, making drafts of instruments available for public scrutiny, and allow scope for public comment. These types of procedures are analogous to rules of procedural fairness in decision-making, and they are required to be exercised *bona fide*, which can mean that comment must at least be genuinely considered.⁸² A duty to consult or take comment into account does not mean the views of those consulted are binding on a policy-maker, planner or regulator.⁸³ Nor does it imply a right to a hearing. A duty to report on the outcome of consultations, or how comment was considered, may be part of the overall duty to consult.

4.2.2 Public inquiries

Public inquiries are a type of deliberative mechanism that can establish independence or political distance between a decision-maker and a consultation process. They involve the calling and assessment of evidence and the production, and usually publication, of reasoned reports justifying recommendations.⁸⁴ Public inquiry bodies include statutory and *ad hoc* panels, internal and external reviews, parliamentary committees, or commissions. In the environmental management context, the public inquiry typically involves a form of hearing procedure, expert participation on the hearing body, and advisory rather than binding outcomes. The participatory character of the public inquiry is based on processes of public hearing. Although not ordinarily producing a binding outcome, public inquiry hearings are a form of adjudicative process; one informed by submissions and evidence provided to the inquiry, leading to a reasoned report.⁸⁵ Models of public participation can vary, although scope for participation through submissions or evidence is usually broad. On a cautionary note, the public inquiry model can be used to side-step the scrutiny and review provided for in administrative appeals.⁸⁶

4.2.3 Deliberative processes

More sophisticated forms of deliberative practice, such as citizen juries, caucuses and conferences are used in Australian environmental management, but they are typically more marginal and/or experimental.⁸⁷ Overarching legal

⁸¹ This does not discount tendencies to the use of participatory processes for manipulation or co-optation: see Sherry Arnstein, 'A ladder of citizen participation' (1969) 35 *Journal of the American Institute of Planners* 216.

⁸² *Communications, Electrical, Electronic, Energy, Information, Postal, Plumbing and Allied Services Union of Australia v QR Limited* [2010] FCA 591, 44 (Logan J); *TVW Enterprises Ltd v Duffy (No 2)* (1985) 7 FCR 172, 179 (Toohey J).

⁸³ *Communications, Electrical, Electronic, Energy, Information, Postal, Plumbing and Allied Services Union of Australia v QR Limited* [2010] FCA 591, 44.

⁸⁴ Catherine Althaus, Peter Bridgman and Glyn Davis, *The Australian Policy Handbook* (Allen & Unwin, 4th ed, 2007) 111–12; see eg, *Resource Assessment Commission Act 1989* (Cth) (repealed); *Planning and Environment Act 1989* (Vic) pt 8; Peter Williams, 'The "Panelization" of planning decision-making in Australia' (2014) 29 *Planning, Practice and Research* 4 426; John Woodward, 'Environmental inquiries in New South Wales' (1984) 1 *Environmental and Planning Law Journal* 317; Ben Richardson and Ben Boer, 'Contribution of Public Inquiries to Environmental Assessment' (1995) 2 *Australian Journal of Environmental Management* 2 90.

⁸⁵ See Denis Galligan, *Due Process and Fair Procedures: A Study of Administrative Procedures* (Clarendon Press, 1996).

⁸⁶ Environmental Defenders Office (NSW), *Merits Review in Planning in NSW* (Report, July 2016) <https://d3n8a8pro7vhmx.cloudfront.net/edonsw/pages/2998/attachments/original/1467777537/EDO_NSW_Report_-_Merits_Review_in_Planning_in_NSW.pdf?1467777537>.

⁸⁷ For statutory models, see for example, *Environment Protection Act 1970* (Vic) s 20B; *Catchment and Land Protection Act 1994* (Vic) s 19J; see generally Cameron Holley and Darren Sinclair, 'Deliberative participation, environmental law and collaborative governance: insights from surface and groundwater studies' (2013) 30 *Environment and Planning Law Journal* 32; Cameron Holley, Neil Gunningham and Clifford Shearing, *The New Environmental Governance* (Routledge, 2012).

and policy models for deliberative practice are maturing.⁸⁸ Model legislative instruments advancing these techniques as an expansion of administrative law are available.⁸⁹

In both law and practice, governments and public agencies have increasingly turned to consultative and deliberative tools to engage the community and NGOs in environmental decision-making. Drawing from wider experience of participatory governance, such as in municipal budgeting⁹⁰ and in open government initiatives,⁹¹ deliberative approaches to environment governance can range from general and targeted consultation procedures through to delegation of decision-making to citizen-based bodies or institutions.

A modern, deliberative and ‘democratic experimentalist’ approach to participation involves the dispersal of power, distributed methods of information gathering, and shared systems of monitoring and problem-solving.⁹² It may require what is termed in US environmental management ‘negotiated rule-making’, which emerged as a response to the rise of administrative rule-making and judicial challenge.⁹³

In principle, under deliberative approaches, organisations and institutions become continually learning organisations, with iterative processes building local, operational learning-by doing experience into adapted processes, following iterative evaluations and ongoing assessment of results, goals and outcomes.⁹⁴ Lessons are shared with others through regional and national coordinating bodies.⁹⁵ This is necessary because in environmental resource management there is always a level of uncertainty about outcomes, so stakeholders should continuously gather and integrate appropriate ecological, social, and economic information with the goal of adaptive improvement.⁹⁶

4.2.4 Conclusions and recommendations

It has been argued in academic⁹⁷ and other literature⁹⁸ that Australian standards for public participation in environmental impact assessment are similar to those operating under key international instruments, such as the *Aarhus Convention*. Shortcomings exist however, such as a general failure in Australian procedures to provide for public participation early in the formative stages (that is, at the options and scoping stage) and to require targeted engagement of key public actors, especially civil society organisations.⁹⁹ The effects of these limitations in Australian processes can be that well-resourced, thoughtful, organised and balanced assessment processes, in which community sectors and all affected interests are engaged, do not occur. Consequently, the current approach can affect the legitimacy of outcomes.

In Australia, public participation in environmental matters has been cautious, at best. A future approach to public participation needs to proceed from a paradigmatic shift – one that facilitates more than ‘notice and comment’ procedures and ‘consultation’ with community and civil society actors toward at least a qualification, if not displacement, of concentrations of power over decision-making.

Greater facilitation and embedding of community and civil society organisations in the making of environmental policy and regulation, and in planning and programme-development, would represent an important point of alignment with the *Aarhus* approach. More extensive and systematic use of tools such as public inquiries should also be part

⁸⁸ Holley, Gunningham and Shearing, above n 87.

⁸⁹ Lisa Blomgren Bingham ‘The next generation of administrative law: building the legal infrastructure for collaborative governance’ (2010) *Wisconsin Law Review* 297; David Fontana ‘Reforming the Administrative Procedure Act: Democracy Index Rule-making’ (2005) 74 *Fordham Law Review* 1 81.

⁹⁰ See for example, Elizabeth Pinnington, Josh Lerner, and Daniel Schugartensky ‘Participatory budgeting in North America: The experience of Guelph, Canada’ (2009) 21 *Journal of Public Budgeting, Accounting and Financial Management* 3, 455.

⁹¹ Bingham, above n 89.

⁹² Shane J Ralston, ‘Dewey and Hayek on Democratic Experimentalism’ (2012) 9 *Contemporary Pragmatism* 2 93, 97.

⁹³ See for example, Lawrence Susskind and Gerard McMahon, ‘The theory and practice of negotiated rule-making’ (1985) 3 *Yale Journal on Regulation* 1 133; Cary Coglianese, ‘Citizen participation in rulemaking: past, present and future’ (2006) 55 *Duke Law Journal* 943.

⁹⁴ Mark Tushnet, ‘Reflections on Democratic Experimentalism in the Progressive Tradition’ (2012) 9 *Contemporary Pragmatism* 2, 255, 258.

⁹⁵ Michael C Dorf and Charles F Sabel, ‘A Constitution of Democratic Experimentalism’ (1998) 98 *Columbia Law Review* 2, 267.

⁹⁶ *Lisbon Principles for Sustainable Governance*, principle 4; discussed in Robert Costanza, Francisco Andrade, Paula Antunes, Marjan van den Belt, Don Boesch, Dee Boersma, Fernando Catarino, Susan Hanna, Karin Limburg, Bobbi Low, Michael Molitor, Joao Gil Pereira, Steve Rayner, Rui Santos, James Wilson and Michael Young, ‘Commentary: Ecological economics and sustainable governance of the oceans’ (1999) 31 *Ecological Economics* 171.

⁹⁷ See Lambropoulos, above n 60, 272–295.

⁹⁸ Dwyer et al, above n 60.

⁹⁹ Lambropoulos, above n 60, 290–295.

of reforms to public participation in environmental matters,¹⁰⁰ provided appeals and adjudicative reviews are not foreclosed as a result – a principle that should be applied to all participatory and deliberative processes. Procedures for consultation and deliberation serve distinct purposes from those for administrative or judicial review: to inform and influence decision-making and implementation, on the one hand, and accountability, improved decision-making and legality, on the other.

Noting that the *Aarhus Convention* provisions on public participation in environmental matters represents an exemplary standard,¹⁰¹ the direction for law reform in this area should contain clear legal standards, including:

- application of participatory procedural rights to decision-making in respect of particular activities impacting on the environment, relevant plans, policies and programs, and the preparation of regulatory instruments; and
- taking a proportionate approach, require the nature, extent and intensity of public participation to reflect potential impacts and significance, complexity, controversy, uncertainty and scope for interrogation, and the nature of public interests affected. Scrutiny and consideration of options at an early stage, a clear mandate and support for the role of civil society and community organisations, and more expansive use of public inquiries of a quasi-judicial character, are measures to be endorsed. Formulation of model ‘tracks’ for public participation should be developed taking these points into account. Any public interest exemptions to participation, such as for emergency or public safety reasons, should be strictly exceptional and in conformity with international and domestic law.¹⁰²

4.3 Access to just remedies

Access to fair, efficient and responsive legal remedies is a cornerstone of democratic practice. Access to justice in environmental decision-making encompasses judicial review (review for legality), administrative or merits review (review for a correct or preferable decision), and civil enforcement of environmental laws against individuals, corporations and governments where they are failing to comply with obligations. Procedural mechanisms, such as the right to seek a remedy and the financial capacity to do so, are integral to the concept of an environmental rule of law. The importance of accessible remedies is heightened by the continuing downward trend in environmental indicators and weaknesses in the enforcement of environmental laws.¹⁰³

4.3.1 Review and remedies

Jurisdiction to review and, as necessary, correct environmental decisions is essential to the proper administration of environmental law and justice. The *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (*EPBC Act*), as the main national environmental law, currently provides for various types of review of decisions made under it, including reconsideration of matters,¹⁰⁴ judicial review in the Federal Court of Australia,¹⁰⁵ and administrative (merits) review in some circumstances in the Administrative Appeals Tribunal (AAT).¹⁰⁶ Scope for administrative review is

¹⁰⁰ See Department of the Environment, Heritage and the Arts, *The Australian Environment Act: Report of the Independent review of the Environment Protection and Biodiversity Conservation Act 1999 (Hawke Review)* (Australian Government, 2009) [2.61], recommendation 4, [7.27]; see also Richardson and Boer, above n 84.

¹⁰¹ See for example, United Nations Economic and Social Council, Economic Commission for Europe, *Meeting of the Parties to the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters: The Maastricht Recommendations on Promoting Effective Public Participation in Decision-making in Environmental Matters, Addendum to the Report of the fifth session of the Meeting of the Parties*, Un Doc ECE/MP.PP/2014/2/Add.2 (29 January 2015); United Nations Economic Commission for Europe, *The Aarhus Convention: An Implementation Guide* (2nd ed, 2014); United Nations Environment Program, *Guidelines for the Development of National Legislation on Access to Information, Public Participation and Access to Justice in Environmental Matters*, UNEP Governing Council Dec SS.XI/5 (26 February 2010) <www.unep.org/civil-society/Portals/24105/documents/Guidelines/GUIDELINES_TO_ACCESS_TO_ENV_INFO_2.pdf>.

¹⁰² Note also the recommendation for greater public involvement with the application of the precautionary principle, in Australian Panel of Experts on Environmental Law, *The Foundations of Environmental Law: Goals, Objects, Principles and Norms* (Technical Paper 1, 2017).

¹⁰³ See State of the Environment 2011 Committee, above n 1; Andrew Macintosh, Amy Constable, Isabella Comfort, Fathimath Habeeb, Mhairin Hilliker, Mandy Liang and Anna-Claudia Oliveros Reyes, *Environmental Citizen Suits in the New South Wales Land and Environment Court: Working Paper* (The Australia Institute, 2016).

¹⁰⁴ For example, in relation to fees, referrals, controlled action decisions and remediation determinations: *EPBC Act* ss 75, 78–79, 514Y, 74C(3)(c), 480J.

¹⁰⁵ *EPBC Act* s 487; or by way of declaratory or injunctive relief under the *EPBC Act* s 473.

¹⁰⁶ For example, *review of decisions about permits to kill or take protection species: EPBC Act s 206A, 221A, 243A, 263A; review of advice regarding compliance with conservation orders: EPBC Act s 473.*

relatively confined under this Act. For instance, key decisions such as those concerning controlled actions are not reviewable in this way.¹⁰⁷

These different mechanisms of review are related to the different purposes and functions of review jurisdictions, and to remedies and relief that can flow from the exercise of those jurisdictions. These purposes and functions include ensuring the legality of decisions, the quality of decisions, or the consistency of outcomes and reasoning. Review jurisdictions are also closely related to constitutional distinctions of the role of courts and of the executive in the administration of government. While not all mechanisms of review under the *EPBC Act* involve public hearings or adjudicative procedures, for current purposes, review is understood as a form of ‘individualised justice’ through hearing procedures, whether in courts or tribunals. This facility of review in environmental governance safeguards the practice of decisions being made in accordance with the rule of law, contributes to quality in decision-making, ensures decision-makers are accountable in an open forum, develops environmental jurisprudence, and highlights problems and issues to be the subject of reform.¹⁰⁸

Despite these benefits, recourse to review has been limited, if not symptomatic of the poor performance of environmental law at the national level. Less than 1% of the more than 5,500 matters referred for assessment under the *EPBC Act* have been challenged.¹⁰⁹ The 2009 Hawke Review of the *EPBC Act* made a series of recommendations about broadening access to merits review under the Act, while also shortening the time period within which applications can be made.¹¹⁰ It noted that decisions made under the *EPBC Act* are complex, and necessarily involve weighing the environmental social and economic considerations inherent in ESD.

4.3.2 Specialist jurisdictions

Jurisdiction to grant remedies ensuring the proper and effective administration of justice in environmental matters also raises the issue of those institutions and bodies best equipped to exercise those jurisdictions. Specialist environmental courts and tribunals operate in several states in Australia. The first such jurisdiction was the Land and Environment Court in New South Wales (NSW). It is equivalent in status to the Supreme Court of NSW. Such bodies were instituted to rationalise and improve environmental decision-making and develop specialised judicial and, as appropriate, non-judicial expertise in these matters.¹¹¹ Over time, specialist environmental courts have also brought a series of other beneficial elements with respect to accountability for decision-making and the administration of justice in the environmental sphere, including authority, independence, visibility, a multi-faceted approach to disputes, the development of environmental jurisprudence, public confidence, problem solving, issue and remedy integration, and more expedient and efficient decision-making than might otherwise be the case. Part of the ‘multi-door’ approach of this type of specialist jurisdiction is the competence to deal with disputes in different ways, including judicial review, administrative review and alternative dispute resolution (ADR), as appropriate, but within the one institution.

Specialised courts and tribunals may be criticised on grounds that their expense is not warranted, other areas of law have higher needs for specialised expertise, environmental cases may be marginalised, general law expertise is diminished by fragmenting and isolating environmental matters, environmental law can be captured by powerful

¹⁰⁷ See generally Chris McGrath ‘Flying foxes, dams and whales: using Federal environmental laws in the public interest’ (2008) 25 *Environmental and Planning Law Journal* 324, 353–355.

¹⁰⁸ See Brian Preston and Jeff Smith ‘Legislation Needed for an Effective Court’ in Nature Conservation Council of NSW, *Promise, Perception, Problems and Remedies: The Land and Environment Court and Environmental Law 1979–1999* (Nature Conservation Council of New South Wales, 1999) 103–121; Brian Preston ‘Characteristics of successful environment courts and tribunals’ (2014) 26 *Journal of Environmental Law* 365.

¹⁰⁹ See C McGrath, above n 107; see also Chris McGrath, Submission no 96 to Senate Standing Committee on Environment and Communications, *Inquiry into Environment Protection and Biodiversity Conservation (Standing) Bill 2015* (11 September 2015); Jess Feehely, ‘Standing up for standing’ (2016) 31 *Australian Environment Review* 4, 106; Chris McGrath ‘Myth drives Australian Government attack on standing and environmental “lawfare”’ (2016) 33 *Environmental and Planning Law Journal* 1, 3.

¹¹⁰ *Hawke Review*, above n 100, ch 15, recommendations 47–50, 303–316; The Review recognised that Ministers are accountable for their decisions ‘either through judicial review in the Federal Court or public opinion’: at 278. The Australian Government responded that ministers were accountable to the Parliament for their decisions and that merits review of preliminary decisions can frustrate an otherwise efficient and timely process: Department of Sustainability, Environment, Water, Population and Communities *Australian Government Response to the Report of the Independent Review of the Environment Protection and Biodiversity Conservation Act 1999* (Australian Government, 2011) <<https://www.environment.gov.au/resource/australian-government-response-report-independent-review-environment-protection-and-biodiversity-conservation-act-1999>>.

¹¹¹ Brian Preston ‘Benefits of judicial specialization in environmental law: The Land and Environment Court of New South Wales as a case study’ (2012) 29 *Pace Environmental Law Review* 396.

interests, and perceptions of specialist bodies as inferior jurisdictions.¹¹² However, the benefits of specialisation that lie, for example, in expertise, the capacity to take multiple approaches to controversies and disputes, efficiency, and the weight accorded to environmental matters, are important considerations and, overall, outweigh drawbacks.

Nationally, Australia has no specialist environmental court or tribunal, whether a distinct environmental court or a jurisdiction within another body. On the other hand, both the Federal Court of Australia and the AAT – the bodies currently responsible for hearing environmental challenges – have undergone significant internal reform since 2014. In the Federal Court, national practice areas and judicial panels have been developed to improve efficiency and consistency in decision-making. The AAT includes members with specialised expertise and on 1 July 2015 became an enlarged amalgamated tribunal.

A case can be made for the adoption of a Federal Court national practice area with a panel of specialist environmental law judges broadly similar to Hawai'i's Environmental Court, with similar reforms in state Supreme Courts where specialist courts and tribunals do not yet exist. This is needed because of the complex multiparty, multidisciplinary, public nature of most environmental disputes.

As there are great financial risks and disincentives to public interest environmental litigation, costs orders on public interest grounds and public subsidies for cases in the environmental sphere are also needed.

The significant constraints on accessing justice in environmental controversies are perhaps exemplified in the relatively small number of public interest cases brought under key laws such as the *EPBC Act*.¹¹³

4.3.3 Standing and 'citizen suits'

Obtaining a remedy or relief from a court or tribunal may be moot if a person has no right to seek it in the first place. Whether the law will permit a court or tribunal to recognise a person as having sufficient interest in an environmental decision to commence proceedings can be an important point of contention early in environmental proceedings. These rules on the right of 'standing' are intended to regulate access to courts or tribunals.¹¹⁴ At common law, the right of standing is restricted to a person whose rights or interests are affected, but they must have more than a 'mere emotional or intellectual' interest.¹¹⁵ Federal legislation has extended that right generally to simply a 'person aggrieved',¹¹⁶ and, under the *EPBC Act*, environmental organisations and persons with a record of involvement in environmental issues are expressly brought within the scope of standing to seek judicial review.¹¹⁷ Standing rights under the *EPBC Act* have, however, been the subject of controversy.¹¹⁸

In some states, such as NSW, there have been long-standing rights for 'any person' to challenge government decisions made or to undertake enforcement proceedings under planning and environmental laws. This is sometimes referred to as 'open standing'¹¹⁹ or 'citizen suits'.¹²⁰ A recent study of environmental litigation in NSW has found that 'the main concern is not a flood of environmental citizen suits, but a drought'.¹²¹

There are variations on these liberal standing rights, depending on the type of legal proceedings. For instance, in administrative (merits) review actions, it may be that a person seeking review must have made a written objection

112 See Preston, above n 108; George (Rock) Pring & Catherine (Kitty) Pring *Greening Justice: Creating and Improving Environmental Courts and Tribunals* (The Access Initiative, 2009).

113 Chris McGrath 'Myth drives Australian Government attack on standing and environmental 'lawfare'' (2016) 33 *Environmental and Planning Law Journal* 1 3. See also Macintosh, et al, above n 103, noting the comparative 'drought' of litigation at the subnational level in which access to justice provisions are relatively strong.

114 Mark Aronson and Matthew Groves, *Judicial Review of Administrative Action* (Thomson Reuters, 5th ed, 2013) 11.50: 'The principal function of any standing rule is to limit access to the courts. It operates as a formal filter managed by judges, in addition to the informal filters confronting any would-be litigant, such as costs'.

115 *Australian Conservation Foundation Inc v Commonwealth* (1980) 146 CLR 493.

116 *Administrative Decisions (Judicial Review) Act 1977* (Cth) s 5.

117 *EPBC Act* ss 475, 487.

118 See for example, Senate Standing Committees on Environment and Communication, *Environment Protection and Biodiversity Protection (Standing) Bill 2015* (Australian Senate, November 2015).

119 See for example, *Planning and Environment Act 1987* (Vic) s 82; *Protection of the Environment Operations Act 1997* (NSW) ss 252–253.

120 Liberal rights of standing under 'citizen suit' provisions in US environmental laws have been a critical tool in the efficacy of those legal protections, as well as a source of innovation in environmental management across areas of water, biodiversity, and air quality: see for example, Barton Thompson, 'The continuing innovation of citizen enforcement' (2000) *University of Illinois Law Review* 185; Susan Daggett 'NGOs as lawmakers, watchdogs, whistleblowers, and private attorneys-general' (2002) 13 *Colorado Journal of International Environmental Law and Policy* 99.

121 Macintosh et al, above n 103.

to the original decision.¹²² If this has occurred, then standing to seek review before an appropriate tribunal or court is available. Elsewhere, third party rights to seek review or enforcement of environmental decisions is complicated by standing requirements.¹²³ Also, at common law, any person may undertake a private prosecution against a person who is alleged to have committed a criminal offence.¹²⁴ Often under environmental or natural resources statutes this common law right is displaced and only particular authorities can commence criminal prosecutions.¹²⁵

The Australian Law Reform Commission (ALRC) has reviewed the law of standing a number of times. In 2015 it restated its 1996 recommendation in favour of open standing, with certain, limited exceptions.¹²⁶ The ALRC has repeatedly dismissed ‘floodgate’ arguments against liberal standing. As noted above, for environmental matters the problem appears to be the other way.

Rights to take legal action in environmental matters are not consistent across Australia and they are not necessarily grounded on consistent bases. Other inquiry bodies have highlighted the lack of national consistency in standing provisions and impacts.¹²⁷ Harmonised standing criteria for judicial and administrative review processes have been suggested elsewhere.¹²⁸

4.3.4 Costs arising from litigation

Even if ‘standing’ is established, access to justice in environmental cases can be illusory if the financial risks and costs of challenging decisions or pursuing legal remedies are a strong disincentive. Breaches or failures of the law will not be remedied, and the valuable perspectives of civil society, private citizens and communities will not effectively be engaged in environmental review. Legal and associated costs (such as costs of experts) represent significant ‘informal filters’¹²⁹ deterring challenges to environmental decisions.

The general rule in Australia is that those who lose court proceedings pay the costs of the case (costs follow the event). There are exceptions to this rule in some tribunals and specialist environmental courts, or in circumstances where a protective costs order or capped costs arrangement is granted for a public interest matter.¹³⁰ The latter are rare. Community groups or individuals seeking judicial review or civil enforcement in relation to public interest environmental matters in the courts may face the risk of paying not only court costs, but all legal costs. Even if the case is a strong one, this risk can be a substantial deterrent to using the law to protect the environment.¹³¹ Mechanisms to cap costs, such as protective costs orders, while important,¹³² face the problem of legal and practical availability varying widely by jurisdiction. In Europe, the use of ADR has been recommended to reduce environmental litigation costs.¹³³

Comparison might be made with the US experience where, across a range of federal environmental, consumer, competition and other statutes, use of the courts and law to achieve public interest outcomes has been encouraged historically. This model of private justice and private attorneys-general¹³⁴ is viewed as supplementary to public

122 See for example, *Planning and Environment Act 1987* (Vic) s 82; under which an objector can seek review of a decision of a ‘responsible authority’ before the Victorian Civil and Administrative Tribunal.

123 See for example, *Environment Protection Act 1970* (Vic) s 33B.

124 See generally Australian Law Reform Commission, *Standing in Public Interest Litigation* (ALRC Report No 27, 1985) ch 7.

125 See for example, *Water Act 1989* (Vic) s 296.

126 Australian Law Reform Commission, *Traditional Rights and Freedoms—Encroachments by Commonwealth Laws* (ALRC Report 129, 2015) [15.63]; referring to Australian Law Reform Commission, *Beyond the Door-Keeper: Standing to Sue for Public Remedies*, (ALRC Report No 78, 1996) rec 2.

127 Australian Law Reform Commission, *Standing in Public Interest Litigation* (ALRC Report No 27, AGPS, 1985). See also Australian Law Reform Commission, *Beyond the Door-keeper: Standing to Sue for Public Remedies* above n 126; Administrative Review Council *What Decisions should be Subject to Merits Review?* (Attorney-General’s Department Australian Government, 1999); Administrative Review Council, *Environmental Decisions and the Administrative Appeals Tribunal* (Attorney-General’s Department Australian Government, Report No 36, AGPS, 1994); Productivity Commission, *Major Project Development Assessment Processes: Research Report* (Australian Government, 2013); Administrative Review Council, *Federal Judicial Review in Australia* (Australian Government Attorney-General’s Department, Report No 50, 2012).

128 Productivity Commission, above n 127, 284–6, citing Administrative Review Council, above n 127.

129 See Aronson and Groves, above n 114.

130 See *Oshlack v Richmond River Council* (1998) 193 CLR 72. The Australian Law Reform Commission (ALRC) recommendations for codifying the grounds for making costs orders have not been implemented and were arguably too vague: ALRC, *Costs Shifting – Who Pays for Litigation in Australia*, (ALRC Report 75, 1995) 13.3–13.4.

131 See for example, Brian Preston, ‘The role of public interest environmental litigation’ (2006) 23 *Environmental and Planning Law Journal* 337.

132 Nicola Pain ‘Protective costs orders in Australia: increasing access to courts by capping costs’ (2014) 31 *Environmental and Planning Law Journal* 450.

133 See for example, J Darpo, *Effective Justice? Synthesis report of the study on the implementation of Articles 9.3 and 9.4 of the Aarhus Convention in the Member States of the European Union*, (Report 2013–10–11/Final, 2013) 42.

134 See Pamela Bucy ‘Private justice’ (2002) 76 *Southern California Law Review* 1; William Rubenstein ‘On “what a private attorney-general is” – and why it matters’ (2004) 57 *Vanderbilt Law Review* 2129.

enforcement and regulation and has been facilitated by ‘citizen suit’ provisions, favourable costs rules (under which parties generally bear their own costs), and the active reward through costs orders of successful parties bringing actions in the public interest. Significantly, it is not environmental statutes that generate the highest rates of financial recovery to successful parties where harm is demonstrated, but those protecting the federal government from fraudulent conduct.¹³⁵

The notion of private actors being encouraged and actively engaged in seeking enforcement and strong public outcomes from environmental laws, on a substantial scale, would represent a paradigm shift in Australian law and practice – arguably one that builds on and goes beyond facilitative standing and costs rules. It would require a conscious reappraisal – and expansion – of the role of citizens and non-governmental actors in enforcement and administration of environmental laws. Movement toward the public subsidy of public interest environmental litigation is perhaps symptomatic of a trend in the direction of ‘private regulation of the public interest’, although its extent has been limited and incrementally withdrawn in recent years,¹³⁶ as evidenced in the de-funding of the various state-based Environment Defenders Offices and other community legal centres.¹³⁷ In the face of a pincer movement of poor national environmental performance and systemic under-enforcement of environmental laws,¹³⁸ it is time to reassess how the private and non-governmental enforcement of environmental laws is resourced. This is likely to require a combination of measures, including the restoration of funding to community legal centres, establishment of a sustainable public interest defence fund, maintenance of tax benefits for environmental advocacy focussed on law and policy,¹³⁹ and adoption of legislative provisions for penalties or forfeitures arising from the prosecution of environmental harms to be distributed to the public interest defence fund.¹⁴⁰

4.3.5 Alternative Dispute Resolution

In Australia ADR in the environmental law and sustainability spheres is a growing area of policy and practice, and forms part of the model litigation obligations guiding public legal service providers.¹⁴¹ ADR provides for an impartial person (that is, a third party) to assist those in a dispute to resolve the issues between them. ADR can include mediation, arbitration, case management conferences, expert determinations, experts’ conferences and other non-judicial processes. Early dispute resolution, and negotiated agreements, can be highly beneficial in the resource management and development sector as stability and certainty for investors can be enhanced, and late litigation costs avoided. The Productivity Commission has recognised the benefits of ADR, but not necessarily for all disputes or all parties.¹⁴² ADR is increasingly part of court and tribunal case-management.

In the US, federal agencies including the Environment Protection Agency (EPA) provide access to and use ADR for civil enforcement, claims against the government, contracts and procurement, workplace disputes, and within small agencies. The EPA assessed ADR favourably in 2000.¹⁴³ In Europe, ADR approaches to management of environmental disputes have also been assessed favourably.¹⁴⁴

¹³⁵ Bucy, above n 134.

¹³⁶ McGrath, above n 107.

¹³⁷ ABC News ‘Funding cut to Environment Defenders Offices described as barbaric’ 19 December 2013 <<http://www.abc.net.au/news/2013-12-18/funding-cut-to-environmental-defenders-offices/5164934>>.

¹³⁸ McGrath above n 109; see also Macintosh, et al, above n 103.

¹³⁹ On proposed changes to tax laws benefiting environmental advocacy, see Peter Burdon, ‘Government inquiry takes aim at green charities that “get political”’ on *The Conversation* (16 April 2015) <<https://theconversation.com/government-inquiry-takes-aim-at-green-charities-that-get-political-40166>>.

¹⁴⁰ See for example, *Endangered Species Act* 16 USC § 11(d).

¹⁴¹ Office of Legal Services Coordination, *Guidance Note No 12: Use of Alternative Dispute Resolution* (ADR) (Australian Government Attorney-General’s Department, re-issued 2015); see also *Civil Dispute Resolution Act 2011* (Cth).

¹⁴² Productivity Commission, *Access to Justice Arrangements*, (Australian Government, Inquiry Report No 72, Vol 1, 2014).

¹⁴³ See the *Administrative Dispute Resolution Act of 1996*, 5 USC § 571; United States Environmental Protection Agency, *ADR Accomplishments Report* (Office of the Administrator, March 2000).

¹⁴⁴ See for example, Axel Volkéry, Nicola Tilche, Peter Hjerp, Shailendra Mudgal, Andreas Mitsios, Nejma André, Lidia Wisniewska, Christine Lucha, Gesa Homann, Elizabeth Tedsen *Study on Environmental Complaint – Handling and Mediation Mechanisms at National Level: Final Report* (Ecologic Institute, 2012) 388.

4.3.5.1 Restorative justice

Restorative justice is an emerging theme in environmental dispute resolution and law enforcement. It is particularly suited to providing a remedy for localised environmental damage where a guilty plea has been entered in relation to an environmental offence, which can be negotiated during the penalty determination process. The *Protection of Environment Operations Act 1997* (NSW) as amended in 2015, enables the Land and Environment Court to make orders for restoration and prevention, for the payment of the costs of investigations, remediation, expenses and compensation, and for the publication of the offence and its consequences, such as in a report to shareholders. It also provides for a payment to the Environmental Trust or another environmental organisation to enable the offender to attend a relevant training course or to establish a relevant training course for employees or contractors or others to attend. A party's undertakings are enforceable. This type of approach can educate offenders, reduce recidivism, achieve restorative outcomes and enable a social licence to operate to continue. Multi-party community conferences may be involved.

4.3.6 Conclusions and recommendations

Access to just legal remedies in environmental matters is consistent with the environmental rule of law and also with best practice in decision-making and governance. To this extent, this pillar of procedural environmental rights is an essential component of environmental democracy. Effective access to justice also comprises an integrated architecture of rights, procedural tools and institutional arrangements. Civil society organisations, as well as concerned individuals, play important roles in ensuring decisions are made in accordance with law and best practice. However, access to justice arrangements under Australian environmental laws vary – by jurisdiction and the mechanism in issue.

Reform of environmental law nationally and via harmonisation across jurisdictions would be conducive to expanded environmental access to justice, which in turn would facilitate stronger environmental governance and a more effective contribution of law to the task of arresting indicators of environmental decline. In so doing, Australia might rise beyond the lacklustre, or 'fair', performance of its national environmental laws in relation to access to justice.¹⁴⁵

Noting this situation, the directions for law reform in respect of access to justice should include:

- extending administrative (merits) review mechanisms to key environmental decisions where they currently do not apply, such as those under Parts 7–9 of the *EPBC Act*,¹⁴⁶ and instituting standard criteria for expanding administrative review arrangements under other national environmental legislation;¹⁴⁷
- the incorporation of 'open standing' or 'citizen suit' provisions within Commonwealth environmental legislation, and the harmonisation of 'citizen suit' provisions across Australian jurisdictions as the principal approach to legal standing;
- legislating for public interest costs protection, so that a court is required to provide for protection from costs for a person bringing or maintaining legal action in the public interest in environmental matters;¹⁴⁸
- establishing a national public interest environmental defence fund; and
- establishing specialist environmental law practice areas and/or judicial panels, as appropriate, within Australia's federal courts (the Federal Court and Federal Circuit Court) and the AAT.
- establishing a national judicial education body on the environment, consistent with global initiatives in this area.¹⁴⁹

¹⁴⁵ Dwyer et al, above n 60.

¹⁴⁶ See McGrath, above n 107, 353–355.

¹⁴⁷ Administrative Review Council, *What Decisions Should Be Subject to Merit Review?*, above n 127, 1.3; cited in McGrath, above n 107, 353–4.

¹⁴⁸ See Environment Defenders Office (Victoria), *Costing the Earth? The Case for Public Interest Costs Protection in Environmental Litigation* (2010); compare the obligation that costs should not be prohibitively expensive as provided for under the *Aarhus Convention*, art 9(4); for detailed consideration of how that concept applies to protective costs mechanisms, see Economic Commission for Europe, *Findings and recommendations with regard to communication ACCC/C/2008/33 concerning compliance by the United Kingdom of Great Britain and Northern Ireland*, (Compliance Committee, 24 September 2010).

¹⁴⁹ See World Environmental Law Congress, *Charter of the Global Judicial Institute for the Environment* (Brazil, 29 April 2016).

5. Aboriginal and Torres Strait Islander peoples'¹⁵⁰ rights related to the environment

Expansion of models of citizenship to encompass greater democratic involvement in environmental matters, such as the *Aarhus* 'pillars', may not be sufficient to achieve just and equitable outcomes for communities who have been historically or structurally marginalised from citizenship. The relationship of Aboriginal peoples to the democratic state and governance, is such an example. Aboriginal communities' relationships to land and natural resources – that is, to Country – are unique, not only because of dispossession and disruption, but also because of their ancient nature and ontological significance to Aboriginal cultures and societies. Reform of environmental law needs to come to terms with these issues, in such a way that builds on gains, such as those achieved through native title, Indigenous Protected Areas (IPAs), land rights legislation, and cultural heritage protection. The interaction between environmental and these other areas of law is important and distinguishable on the basis that its functions are not solely protective or restorative of ecological processes and benefits, but moreover of cultural, social and political outcomes.¹⁵¹ As a result of the particular circumstances of colonisation and the unique relationship of Aboriginal peoples with the environment, environmental law needs to continue to evolve to come to terms with these realities.

5.1 International norms and their adoption

International norms are an important source for developing Australian environmental law in relation to Aboriginal communities. Great strides have been taken in international law, including in MEAs and human rights treaties, to recognise the rights of Aboriginal peoples. This includes recognition in relation to natural and cultural resource management. *The International Covenant on Civil and Political Rights* and the *International Covenant on Economic, Social and Cultural Rights* protect various relevant rights, although these tend to be interpreted in a moderate way, as do most other human rights instruments that proscribe racial discrimination.¹⁵²

International environmental law instruments recognising indigenous peoples' rights or democratic aspirations have not been fully implemented in Australian domestic law. Those instruments include the *International Labour Organization Convention 169* (ILO-convention 169),¹⁵³ and the *Convention on Biological Diversity* (CBD).¹⁵⁴ The *Akwe:Kon Guidelines*,¹⁵⁵ adopted under the CBD in 2004, provide guidance for the conduct of impact assessments in respect of developments proposed to take place on or to impact on indigenous communities' sacred sites or lands and waters they traditionally occupied or used.

The leading international instrument on Aboriginal peoples' rights is the 2007 *United Nations Declaration on the Rights of Indigenous Peoples* (UNDRIP),¹⁵⁶ which recognises a broad range of rights including:

- rights protective of indigenous peoples' land, territories and resources, including their ownership, use and control;
- rights to redress in circumstances of the interference with their rights;
- rights to conservation and protection of the environment and productive capacity of lands, territories and resources;
- rights protective of cultural heritage and traditional knowledge;
- rights to determine priorities and strategies for development.

¹⁵⁰ The term 'Aboriginal' is used generally in this paper to encompass comparable terms such as 'indigenous', 'Aboriginal and Torres Strait Islander', 'First Nations', or 'First Peoples'. Other terms are used where appropriate in the context.

¹⁵¹ This is exemplified in, for example, articles 25–32 of the *United Nations Declaration on the Rights of Indigenous Peoples*, GA Res 61/295 (Annex 1), (13 September 2007) as considered below.

¹⁵² See for example, Human Rights Committee, *Views: Communication No 197/1985*, UN Doc A/43/40 (27 July 1988) (*Kitok v Sweden*); Human Rights Committee, *Views: Communication No 167/1984*, UN Doc CCPR/C/38/D/167/1984 (26 March 1990) (*Lubicon Lake Band v Canada*); Human Rights Committee, *Views: Communication No 511/1992*, UN Doc CCPR/52/D/511/1992 (26 October 1994) (*Ilmari Lansman v Finland*); Human Rights Committee, *Views: Communication No 671/1995*, UN Doc CCPR/C/58/D/671.1995 (30 October 1996) (*Jouni E Lansman v Finland*).

¹⁵³ International Labour Organization (ILO), *Indigenous and Tribal Peoples Convention*, adopted 7 June 1989, Convention No 169, 76th sess (entered into force 05 September 1991).

¹⁵⁴ *Convention on Biological Diversity* adopted 5 June 1992 1760 UNTS 79 (entered into force 29 December 1993); see especially art 8(j).

¹⁵⁵ Secretariat of the Convention on Biological Diversity, *Akwé:Kon Voluntary Guidelines for the Conduct of Cultural, Environmental and Social Impact Assessment regarding Developments Proposed to Take Place on, or which are Likely to Impact on, Sacred Sites and on Lands and Waters Traditionally Occupied or Used by Indigenous and Local Communities*, (CBD Guidelines Series, Montreal, 2004).

¹⁵⁶ *United Nations Declaration on the Rights of Indigenous Peoples* (UNDRIP), GA Res 61/295 (Annex 1), (13 September 2007).

The *UNDRIP* framework articulates rights for indigenous peoples in relation to land and/or natural resources. Its soft law character means *UNDRIP* contains no binding obligations on states, but it is nevertheless a key expression of internationally-recognised norms.¹⁵⁷ One of the most important norms *UNDRIP* affirms is the principle that indigenous peoples are entitled to the exercise of free, prior and informed consent (FPIC) in relation to actions affecting them. This right is given a variety of expressions, including as an obligation on states to ‘take effective measures to ensure... free, prior and informed consent’,¹⁵⁸ ‘to consult and cooperate in good faith...in order to obtain free, prior and informed consent’,¹⁵⁹ and that such consent is ‘freely agreed’.¹⁶⁰ It is the second of these formulae that is perhaps most relevant, as it bears on legislative and administrative measures and development actions. While *UNDRIP* traverses a wide range of topics and matters, for present purposes, APEEL emphasises the principle of FPIC as a critical concept of the role of Aboriginal communities and organisations in environmental governance and decision-making.

This is because of Aboriginal communities’ special attachments to land and resources, deriving from cultural, traditional, customary or historic connections. The integrity and vitality of Aboriginal communities and well-being of their members can depend fundamentally on such connections. Those attachments may have expression in legal or beneficial rights, interests, entitlements, allocations or reciprocal obligations on other actors. Furthermore, through mechanisms of environmental governance, such as planning or approvals, Aboriginal peoples’ rights and interests interact (and may inter-operate) with environmental law. This interaction is not without complexity nor does it signify inevitable trajectories of benefit for the environment or for Aboriginal communities.¹⁶¹ Use of lands and exploitation of natural resources owned, controlled or occupied by Aboriginal communities, or the subject of traditional or cultural attachment, can give rise to competing or conflicting uses, claims, preferences and actions. Activities concerning mining, water resources management, land management, infrastructure development, biodiversity and cultural knowledge are particularly significant in this regard.

5.2 Distinctive principles for environmental law – free, prior and informed consent (FPIC)

The right to FPIC is an aspirational norm in the governance of natural and cultural resources. It has relevance in two broad sets of circumstances. One of these is where Aboriginal communities have access to and can exercise legally-cognisable rights, entitlements, allocations, interests or title to land, territory and/or resources. Ranging from rights to exclusive control, veto rights,¹⁶² statutory rights to negotiate and make agreements,¹⁶³ and rights to co-management,¹⁶⁴ this ‘entitlement or allocation’ approach to Aboriginal involvement in land and resources management can be compared to enforceable rights to FPIC in relation to acts, projects, decision-making or governance.

Another set of circumstances is associated with procedures for consultation or engagement with Aboriginal communities where they are likely to be impacted by actions, such as resource projects, regulatory action, public land management or infrastructure projects. This ‘procedural’ approach equates more to a formal condition on exercises of power, such as where a decision may be made only subject to consultation, consent or a similar qualification, and perhaps more directly corresponds to formal provisions expressed in *UNDRIP*. An example of procedural approach is the duty on Basin States to consult with Aboriginal organisations in preparing water planning instruments under the Basin Plan.¹⁶⁵ There is a limited analogy also to Canada’s constitutionally-based ‘duty to consult’ with Aboriginal communities, including in the form of so-called ‘deep consultation’ and requirements for accommodation as well as consultation.¹⁶⁶ This ‘duty to consult’ entails forms of conduct on the part of the Canadian Crown that may be

157 See Megan Davis, ‘To bind or not to bind: The United Nations Declaration on the Rights of Indigenous Peoples Five Years On’ (2012) 19 *Australian International Law Journal* 17.

158 *UNDRIP*, above n 156, art 29(2).

159 *Ibid* arts 19, 32(2).

160 *Ibid* art 30(1).

161 Benjamin Richardson ‘The ties that bind: indigenous peoples and environmental governance’ in Benjamin Richardson, Shin Imai and Kent McNeil (eds) *Indigenous Peoples and the Law: Comparative and Critical Perspectives* (Hart Publishing, 2009).

162 *Aboriginal Land Rights (Northern Territory) Act 1976* (Cth) pt IV (which includes legislative machinery for negotiation and agreement over mining in the Northern Territory).

163 *Native Title Act 1993* (Cth) pt 2 div 3 subdv P.

164 See for example, *Conservation, Forests and Lands Act 1987* (Vic), pt 8A.

165 *Basin Plan 2012* (Cth), Ch 10, Part 14. Consultation requirements under that part include regard to an identified, broad set of matters (for example, indigenous ‘uses’ and ‘values’), as well as to legally cognisable interests, such as native title or registered cultural heritage.

166 *Haida v British Columbia (Minister of Forests)*, 2004 SCC 73; ; *Gitxaala Nation v Canada*, 2016 FCA 187; Lorne Sossin ‘The duty to consult and accommodate: procedural justice as Aboriginal rights’ (2010) 23 *Canadian Journal of Administrative Law and Practice* 93.

instructive for Australia in building a right to FPIC. The foundations of the Canadian situation are, however, legally and constitutionally distinct from those operating in Australia.¹⁶⁷

In practice, these approaches often overlap, and the breadth and strength of rights and interests contained with those approaches may be an important test on requirements to consult and/or obtain consent.

As a normative device, the right to FPIC is an exceptional standard insofar as it includes not only voluntary, early and notified participation by Aboriginal communities but, additionally, agreement or concurrence. As distinct from ordinary concepts of consultation, FPIC includes obligations on the part of actors impacting Aboriginal communities to negotiate, engage in agreement-making, and/or affect forms of co-management of resources. Further to this, the content of FPIC derives from sources such as the right to self-determination.¹⁶⁸ A more pragmatic demonstration of this standard in decision-making can equate to a 'social licence' to operate in key circumstances, such as large resource or infrastructure projects with major impacts on indigenous communities.¹⁶⁹ The concept can apply to private instruments, such as contracts or corporate policies.¹⁷⁰

The principle of FPIC has not been implemented in Australian environmental legislation. It could represent a standard of general application in circumstances where actions impacting significantly on ecosystems or places concurrently impact on Aboriginal peoples' uses, values, interests, and/or communal fabric. Over and above general norms of environmental democracy, such as rights to information or to participation or to a healthy environment, the right to FPIC is a right attaching to particular and distinctive relationships and attachments of indigenous communities to land and resources.

One of the challenges of incorporating a standard of FPIC into Australian environmental law is that the normative content of a right to FPIC remains at best unsettled and undeveloped. It may appear somewhat straightforward to identify the content to adjectival provisions such as 'free', 'informed' and 'prior' consent. Those standards may borrow from other areas of procedural law, such as a requirement that 'free' consent not include a pyrrhic consent, oppressively obtained; that information includes a basis of full knowledge properly explained; and 'prior' consent is that obtained well in advance of proposed activities proceeding in earnest. Even these standards can be problematic.¹⁷¹

Yet the most challenging element of the FPIC model is the obligation of 'consent'. The structure of consent may need to include determination of *whose* consent should be obtained (for example, the community), what procedures of agreement and decision-making are appropriate, the possible role of third-parties, dispute resolution procedures (up to and including arbitration), and potentially rules for abrogating the right (such as in circumstances of over-riding public interest).¹⁷² While it is uncertain whether the concept contains any right of veto, its scope likely includes its ordinary meaning¹⁷³ which suggests Aboriginal participation of a particular character – namely, as a *party* to decision-making. The *UNDRIP* obligation to 'consult and cooperate ... in order to obtain consent' adds an additional complexity if this formula is adopted. Given its prominence within the *UNDRIP*, it is a formulation to be considered for national laws. That formulation establishes consultation and cooperation as procedures conditioned by achievement of consent as an obligatory outcome. The purpose of consultation and cooperation is to acquire consent – the converse side of this obligation is arguably Aboriginal communities' right to consultation and cooperation in anticipation of an exercise in agreement-making.

¹⁶⁷ The Canadian duty is grounded in constitutional recognition of Aboriginal communities and a fiduciary relationship of the Canadian Crown to Aboriginal Nations. Recognition of treaty rights and broad forms of Aboriginal title are also critical to procedural obligations in respect of First Nations under Canadian law: see Sossin, n 166 above; Kent McNeil 'Aboriginal rights, resource development, and the source of the Provincial duty to consult in *Haida Nation* and *Taku River*' (2005) 29 *Supreme Court Law Review* 447.

¹⁶⁸ See Brant McGee 'The community referendum: participatory democracy and the right to free, prior and informed consent to development' (2009) 27 *Berkeley Journal of International Law* 2 570, 571: 'The concept of free, prior and informed consent is based on the rights of participation and consultation, self-determination, and indigenous property rights'.

¹⁶⁹ UN General Assembly, *Report of the Special Rapporteur of the Human Rights Council on the rights of indigenous peoples*, Victoria Tauli-Corpuz: *Conservation and Indigenous Peoples' Rights*, UN Doc A/71/150 (29 July 2016); Susan Bass, *Prior Informed Consent and Mining: Promoting Sustainable Development of Local Communities* (Environmental Law Institute, 2004) 2.

¹⁷⁰ See for example, Amy Lehr and Gare Smith, *Implementing a Corporate Free, Prior and Informed Consent Policy: Benefits and Challenges* (Foley Hoag eBook, 2010).

¹⁷¹ McGee, above n 168, 589–91.

¹⁷² See Bass, above n 169; the overriding public interest proviso operates for instance under *UNDRIP*, art 29 in relation to military activity on indigenous lands.

¹⁷³ See McGee, above n 168, 591: 'The major focus of disputes over the meaning of FPIC is the definition of "consent." The dictionary definition, "capable, deliberate, and voluntary agreement or concurrence in some act or purpose..." also includes several synonyms - agreement, assent, and approval. The original treaty source of FPIC, *Convention 169* of the ILO, does not state that FPIC gives communities absolute veto power over a proposed project'.

The gap between concept and practice of a right to FPIC, by governments, international institutions and corporations, often remains substantial, although examples of good practice exist.¹⁷⁴ Concepts of FPIC can be infected by political expediency, leading to circumstances in which actual practices fall short of any recognisable norm of consent, or consent itself is reduced to concepts of ‘consultation’.¹⁷⁵

Clarifying the content of FPIC does not necessarily resolve the issue of how provisions giving effect to a right to FPIC should and/or can function through environmental statutes. Aboriginal peoples’ involvement in environmental governance across Australia is occurring through various mechanisms, such as agreement-making under land rights laws, native title, land and resource use legislation,¹⁷⁶ and alternative legal mechanisms.¹⁷⁷ While Aboriginal consent and agreement-making operates under certain existing legal frameworks, access to procedural rights and agreement-making through the vehicle of national environmental laws remains highly variable. IPAs and ‘co-management’ under environmental and natural resources laws are important frameworks.¹⁷⁸ But they are limited, incremental measures. Communities most severely and extensively affected by colonisation processes are likely to have connections to land, resources and places most disrupted and/or modified and hence the scope for recognition of Aboriginal interests through entitlement, allocation or procedural right is weakest.

Operation of the FPIC principle through the vehicle of environmental legislation suggests that norms of FPIC should apply, in a graduated manner, to Aboriginal interests concurrently with features of environmental protection or conservation. This ‘dual character’ of places or objects would be a basis for the right of FPIC to be exercisable by an Aboriginal community.

It has been suggested that the operation of FPIC, as distinct from other standards of participation, properly applies to major actions, projects of activities, likely to have substantial disruptive effects, and a dual (or potentially multi) track approach and that ‘dynamic understanding of FPIC’ might be emerging.¹⁷⁹

APEEL recognises that there are circumstances where environmental or natural resources management and indigenous participation coincide and need to be ‘inter-operable’.

5.3 Conclusions and recommendations

The recognition within Australian law of the rights and interests of Aboriginal communities in relation to land and resources has evolved along a number of key tracks, such as property law and heritage laws, which have major influences on environmental governance.¹⁸⁰

Precise expression of the right to FPIC consistent with international law needs still to be developed. However, the provisions of the *UNDRIP* should be a starting point for that development. Similarly, precise circumstances in which such a right should apply would need to be the product of further work and discussions.

174 See for example, Bass, above n 169.

175 McGee, above n 168.

176 There are discrete state-based agreement-making regimes, such as under the *Traditional Owner Settlement Act 2010* (Vic), which can provide for land-use agreement as well as agreements relating to particular natural resources. The number of these agreements remains limited.

177 For example, *Kungun Ngarrindjeri Yunnan Agreement 2009* <environment.sa.gov.au/files/sharedassets/public/cllmm-cllmm-gen-kungunngarrindjeriyunnanagreement.pdf>, which establishes obligations under a common law agreement between the South Australian Government and Ngarrindjeri representative organisations in South Australia.

178 See for example, in relation to water resources, Christina Son ‘Water reform and the right of Indigenous Australians to be engaged’ (2012) 13 *Journal of Indigenous Policy* 3; Poh-Ling Tan and Sue Jackson ‘Impossible dreaming – does Australian water law and policy fulfil Indigenous aspirations?’ (2013) 30 *Environmental and Planning Law Journal* 132.

179 See M Barelli ‘Free, prior and informed consent in the aftermath of the UN Declaration on the Rights of Indigenous Peoples: developments and challenges ahead’ (2012) 16(1) *International Journal of Human Rights* 1; citing the opinion of the Inter American Court of Human Rights in *Saramaka People v Suriname* [2007] Inter-Am Court HR (ser C) No 172.

180 See for example, Rosalind Bark, Marcus Barber, Sue Jackson, Kirsten Maclean, Carmel Pollino and Bradley Moggridge ‘Operationalising the ecosystem services approach in water planning: a case study of indigenous cultural values from the Murray-Darling Basin, Australia’ (2015) 11 *International Journal of Biodiversity Science, Ecosystem Services and Management* 3 239. The integration of Aboriginal and non-Aboriginal paradigms in legal and policy systems has been progressed, in particular, in relation to water resources law. That phenomenon arguably has been stimulated by water reform initiatives in the Murray Darling Basin. It is also a sphere of law now influenced significantly by environmental considerations given, for instance, the influences of international environmental agreements on the federal water laws (*Water Act 2007* (Cth)) that now governs the Basin.

APEEL considers that Australian environmental law should include the principle of FPIC by Aboriginal communities in actions significantly affecting them or their interests. The operation of that right might be framed in the following manner:

- The right of FPIC should be framed as deriving from:
- an obligation ‘to consult and cooperate...in order to obtain consent’;
- an obligation properly grounded on voluntary and fully informed participation, commenced early in the planning or proposal-making stages of the relevant actions; and
- an obligation operating along a spectrum from consultation to accommodation or veto, depending on the circumstances (such as the nature of rights and interests affected, the scale of actions, and so on).
- A right attached to environmental actions at key points of decision-making cycles, such as the referral stage of proposals, the bioregional assessment and planning stages of landscape management, or nomination for heritage listing.
- A right attached to those stages where an Aboriginal community can show their interests are likely to be affected significantly, specifically as those interests are expressed in impacts on connections to land or resources. ‘Connection’ should be understood in a wide, rather than narrow, sense.¹⁸¹
- The right to FPIC under national environmental legislation is a ‘reserved’ right where other forms of legal rights or interests, such as recognised through title, agreement or allocation, are not available to an Aboriginal community who seek participation in environmental or natural resources governance and decision-making.

¹⁸¹ See in particular the recommendations of the Australian Law Reform Commission, *Connection to Country: Review of the Native Title Act 1993 (Cth)* (ALRC Report 126, 2015) concerning s 223(1) of the *Native Title Act*. The ALRC report also contains important consideration and recommendations on other matters relevant to FPIC models, such as around ‘authorisation’ provisions and establishment of who is entitled to participate in (determinative) processes.

6. 'Rights of nature'

There is a second emerging subject which may be considered as a paradigmatic 'voice' or source of the exercise of environmental rights and duties: that is nature itself. This idea is not solely a hypothetical or abstract one. Rather, it is a principle on which legal models and procedures can and have been developed. However, it is likely that the 'rights of nature' approach to environmental governance will remain, to the extent it is part of the environmental law armoury, selective and specialised, attached, for example, to entities (such as places or natural objects) bearing particular and highly significant values.

The centre of rights and duties can shift from a notional human emphasis or focus to make nature itself the legal subject. Although law is an inherently human construct, there is an emerging school of thought seeking to affix legal rights and duties to natural objects or places themselves rather than the human 'beneficiaries' of nature's values and services.¹⁸² This 'earth jurisprudence' or 'wild law' approach was famously expressed in Christopher Stone's disquisition on whether 'trees have standing'¹⁸³ and its imparting influence on the dissenting judgment of Justice Douglas in *Sierra Club v Morton*:

Inanimate objects are sometimes parties in litigation. A ship has a legal personality, a fiction found useful for maritime purposes...So it should be as respects valleys, alpine meadows, rivers, lakes, estuaries, beaches, ridges, groves of trees, swampland, or even air that feels the destructive pressures of modern technology and modern life. The river, for example, is the living symbol of all the life it sustains or nourishes – fish, aquatic insects, water ouzels, otter, fisher, deer, elk, bear, and all other animals, including man, who are dependent on it or who enjoy it for its sight, its sound, or its life. The river as plaintiff speaks for the ecological unit of life that is part of it. Those people who have a meaningful relation to that body of water – whether it be a fisherman, a canoeist, a zoologist, or a logger – must be able to speak for the values which the river represents and which are threatened with destruction.....The voice of the inanimate object, therefore, should not be stilled.¹⁸⁴

Although of limited influence currently in Australia, 'rights of nature' models have garnered support in jurisdictions such as New Zealand, where there is strong connection with Maori roles in governance.¹⁸⁵ Elsewhere the concept of investing rights in nature has received recognition in rather celebrated circumstances such as in the *Constitution of Ecuador* where again there is a strong indigenous link with the approach.

Certain common themes operate in the 'rights of nature' approaches to the design of legal tools and mechanisms. First, the investment of legal rights in natural places or objects is founded on the idea that those places or objects are themselves directly invested with legal, or juridical, personality.¹⁸⁶ That personality is a deemed legal fiction useful for the purposes of recognising the values, character, requirements and faculties of those places or objects. Legal personality is not, for the purposes of this approach, invested in a natural or other person (such as a body corporate or the Crown) who is empowered or obliged to protect those values and characteristics or to act to preserve them. So, in principle, it is 'nature' itself, not the citizen or state, who can use the law to take protective or restorative action.¹⁸⁷

Secondly, the place or object needs to be recognised in an instrument of law under which rights can be recognised and enforced. In New Zealand, legal protection of the Whanganui River via settlement processes under the *Treaty of Waitangi* was achieved through a Deed of Settlement made under legislation.¹⁸⁸ The legal instrument allows the place or object to be protected and gives it legal status.

182 Although the paradigm might more correctly be identified as rights for nature: see Anne Shillmoller and Alessandro Pellizon 'Mapping the terrain of Earth Jurisprudence: landscape thresholds and horizons' [2013] 3 *Environmental and Earth Law Journal* 1.

183 Christopher Stone 'Should trees have standing? – toward legal rights for natural objects' (1972) 45 *Southern California Law Review* 450.

184 *Sierra Club v. Morton*, 405 US 727 (1972).

185 See James Morrison and Jacinta Ruru 'Giving voice to rivers: legal personality as a vehicle for recognising Indigenous Peoples' relationships to water' (2010) 14 *Australian Indigenous Law Reporter* 49; Linda Te Aho 'Ruruku Whakatupua Te Mana o Te Awa Tupua – Upholding the Mana of the Whanganui River' (2014) (May) *Maori Law Review* <<http://maorilawreview.co.nz/2014/05/ruruku-whakatupua-te-mana-o-te-awa-tupua-upholding-the-mana-of-the-whanganui-river>>.

186 Stone, above n 183.

187 This can in theory extend to 'nature', such as threatened species, being afforded rights (in effect the right to sufficient habitat) analogous to property rights: see John Hadley 'Want to stop biodiversity loss? Give animals property rights' in *The Conversation* (12 April 2011) <<https://theconversation.com/want-to-stop-biodiversity-loss-give-animals-property-rights-582>>.

188 *Whanganui Iwi (Whanganui River) Deed of Settlement* (2014) <www.govt.nz/treaty-settlement-documents/whanganui-iwi/whanganui-iwi-whanganui-river-deed-of-settlement-summary-5-aug-2014> to be given effect in legislation: see *Te Awa Tupua (Whanganui Claims Settlement) Bill* 2016 (NZ). See also *Waikato-Tainui Raupatu Claims (Waikato River) Settlement Act* 2010 (NZ).

Thirdly, a key purpose of legal personality invested in nature is to protect and, as necessary, restore the health, well-being or integrity¹⁸⁹ of the place or object at issue, to recognise and remedy injury, and/or to restrain conduct causing or likely to cause injury. These are commonplace legal principles extended to nature. In principle, the factual and normative content of the natural object, and hence the basis of its needs, interests and any injury, can be derived from scientific sources, such as ecology or biology as relevant, or cultural sources, such as Aboriginal values and epistemic models. Recognition of the right of a natural place or object to health or integrity does not operate as an absolute right, but rather a right that can be affected by other rights, such as those recognised in natural resources laws to take water, biodiversity, sub-surface minerals or other resources.¹⁹⁰

Fourthly, the exercise of legal personality cannot be a function of nature itself, but rather proceeds through an appropriately designed vehicle of its legal recognition. The favoured model is a legal and institutional arrangement analogous to guardianship.¹⁹¹ The notion that a person can act as a substitute for another legal person, specifically in circumstances of the incompetence or incapacity of the latter is expanded under this paradigm to encompass the needs and interests (for example, 'integrity' and 'health') of the natural entity. Certain environmental statutes have enabled community and non-governmental bodies to assume what is often a role of de facto 'guardian' of a place or natural object. One example of that development is the emergence of 'riverkeeper' and 'waterkeeper' organisations throughout the US and their successful use of the Federal *Clean Water Act* of 1972.¹⁹² Integration of indigenous rights and interests with environmental protection laws has been an important stimulus to 'guardianship' and the exercise of the rights on behalf of significant places and objects. There are important alignments between orthodox legal models and indigenous concepts of 'a personified natural world'.¹⁹³

6.1 Conclusions and recommendations

There is a beauty and even simplicity in extending entrenched legal models of personhood to nature, especially places or things of outstanding value or importance. Although proposed more than 40 years ago, the concept in application remains quite radical and under-developed. This is certainly the case in Australia, however the potential for its application in Australia as a tool to give more emphatic voice and expression to the protection and integrity of natural places or objects can be seen. For instance, world or national heritage areas, as places of outstanding significance (often both naturally and culturally), are protected under the *EPBC Act*; the scheme of their values is described, and special institutional management arrangements can be established. The Great Barrier Reef is but one, especially prominent example. Would a formal legal personality and models of 'guardianship', rather than a management plan, a dedicated statutory authority, and liberal enforcement rights – all of which currently exist – add much to the protection of the Reef? Further, would that sort of framework contribute materially to protection of, say, a threatened species, a river basin, or gazetted protected area? The idea of giving the Great Barrier Reef a form of discrete legal personality, reflecting in law its integrity as an ecological system (as informed by science for example), seems intuitively attractive.¹⁹⁴ However, giving that status to the Reef will still only be as meaningful as the objective framework and the practical machinery of the law permits, including the balancing of the inevitable conflicts between human needs and interests and the interest of the ecological integrity and health. The rights afforded to these subjects – nature and human persons – will not inherently be absolute therefore, but will rather give weight to key objectives and purposes attached to them, such as 'ecological integrity' or 'human dignity'.

As Douglas Fisher has argued,¹⁹⁵ the system of environmental law and governance may well be moving in any case

189 On the role of 'ecological integrity' as a principal standard and driver for an ecological jurisprudence, the work on Laura Westra is prominent: see for example, Laura Westra, *Ecological Integrity and Global Governance: Science, Ethics and the Law* (Earthscan, 2016); Laura Westra, Peter Miller, James Karr, William Rees, and Robert Ulanowicz, 'Ecological integrity and the aims of the global integrity project' (Global Ecological Integrity Group, n.d.) www.globalecointegrity.net/docs/ProjectAims.pdf; for an example of application of the concept in Australia (to management of the Murray Darling Basin), see Peter Burdon 'Earth jurisprudence and the Murray Darling: the future of a river' (2012) 37 *Alternative Law Journal* 2 82.

190 See Morrison and Ruru, above n 185.

191 Stone, above n 183, 464–73.

192 John Cronin and Robert F Kennedy Jnr, *The Riverkeepers: Two Activists Fight To Reclaim our Environment as a Basic Human Right* (Scribner, 2009).

193 Morrison and Ruru, above n 185, 50.

194 See Environment Defenders Office of North Queensland, *Legal Personality for the Great Barrier Reef: What does it Mean?* (Discussion Paper 1, 2014). <[http://www.edong.org.au/documents/General/Legal%20Personality%20for%20GBR%20\(Final\).pdf](http://www.edong.org.au/documents/General/Legal%20Personality%20for%20GBR%20(Final).pdf)>.

195 Douglas Fisher 'Jurisprudential challenges to the protection of the natural environment' in Michelle Maloney and Peter Burdon (eds) *Wild Law – In Practice* (Routledge, 2014).

toward a sort of synthesis of the human-centred approach to managing nature and the nature-centred approach typified in debates around legal personality and guardianship. The formality of investing in natural places or objects a legal personality and rights akin to human rights, enforceable in a similar manner, may not matter as much as the legal recognition (and enforceability) of values representative of ecological integrity and health: ‘...recogni[s]ing environment and nature under the law arguably affords to them a form of personality and status’.¹⁹⁶ Yet the ‘rights of nature’ approach can potentially make certain contributions to a legal framework that ‘equali[s]e[s] nature and humans, both parts of the global environment, in the eyes of the law’.¹⁹⁷ One of these is to recognise, in principle, a ‘community of subjects’ encompassing human and natural subjects, rather than nature being rendered entirely as an object dominated and ordered by humans (for example, as discrete ‘resources’ and property). This can be facilitated through the tools of legal personality and standards of ‘ecological integrity’. At a more practical level, investing enforceable rights in particular places or objects, via their ‘guardian’, may supply greater coherence and effectiveness to governance arrangements in some circumstances, and provide a powerful moral and rhetorical focus for protection or restoration through moves toward the ‘personification’ of the place or object.

Noting the potential inherent in the ‘rights of nature’ approach, but the limited and under-developed character of its application in practice, APEEL recommends:

- Further exploration and consideration of the application of key mechanisms of this approach, including investing legal personhood in nature and wider use of standards of ecological integrity in environmental law. This exploration could include an inquiry by the ALRC.
- That this exploration should include selective and strategic experimentation with this approach in the governance of natural places or objects, especially where there is a consensus to do so or one can be developed. Another criterion for exploring where or how the rights of nature approach should be applied could be to systems of special or outstanding importance.
- That this exploration should include the development of model legislation and legislative projects.

¹⁹⁶ Ibid, 110.

¹⁹⁷ Ibid, 95.

7. Public integrity mechanisms in the environmental context

Best practice environmental decision making requires not only governmental accountability, transparency and integrity, but also oversight institutions to ensure compliance.¹⁹⁸ Integrity in public administration has been described as ‘earning and sustaining public trust by serving the public interest; using powers responsibly; acting with honesty and transparency; and preventing and addressing improper conduct’.¹⁹⁹

APEEL is of the view that it is critical that Australia have institutions enhancing accountability, transparency and integrity in environmental decision-making. Environmental decisions may be at particular risk of corruption or improper conduct, as those decisions often relate to substantial land use developments that provide significant profits to proponents, such as mining projects, greenfield housing developments, and infrastructure projects. Both the NSW and Tasmanian anti-corruption commissions have reported that a quarter to a third of all corruption complaints they have received related to planning, energy, infrastructure and resources decisions.²⁰⁰

Good decision-making is critical to environment protection. Even where outright corruption and improper conduct are not present, poor administration in environmental decision making can lead to bad decisions and distrust of government.²⁰¹ Often the last line of defence for the environment is a decision by a minister whether to allow development or not.

A number of integrity bodies currently exist at the federal and state level in Australia, including ombudsmen, auditors-general, commissioners for the environment, human rights agencies and anti-corruption agencies. However, there is no national independent environmental integrity body or authoritative integrity institution for the protection of the environment at arms-length from government,²⁰² such as a national Independent Commission against Corruption (ICAC).²⁰³ A Select Standing Committee was inquiring into the need for a National Integrity Commission (NIC) in 2016, but ceased to exist when Parliament was dissolved for the 2016 election.²⁰⁴ APEEL’s view is that the committee and that inquiry should be reconstituted.

A national environmental integrity body could play a critical role in enhancing environmental democracy in Australia. By providing systematic review, monitoring and auditing, such a body can further good governance by advancing accountability and transparency. The functions of such a body might additionally include non-exclusive standing to commence or join proceedings on behalf of the environment (including natural and cultural places or objects or species) as one means of seeking environmental protection.²⁰⁵

These mechanisms would provide for practical, objective, and rigorous examinations of how environmental decisions, legislation, policies and programs are managed and implemented against their objectives and targets.

Comparative examples of integrity agencies for environmental governance include New Zealand’s Parliamentary Commissioner for the Environment,²⁰⁶ Ontario’s Environmental Commissioner,²⁰⁷ and (until 2012) Hungary’s Parliamentary Commissioner for Future Generations.²⁰⁸ These institutions have strong integrity powers with legislative

198 Tim Jewell and Jenny Steele, *Law in Environmental Decision-making: National, European, and International Perspectives* (Oxford University Press, 1998).

199 Chris Field, ‘The fourth branch of government: The evolution of integrity agencies and enhanced government accountability’ (2013) 72 *AIAL Forum* 24; see also JJ Spigelman ‘The integrity branch of government’ (2004) 78 *Australian Law Journal* 11, 724.

200 NSW Independent Commission Against Corruption (ICAC), *The exercise of discretion under Part 3A of the Environmental Planning and Assessment Act 1979 and the State Environmental Planning Policy* (Major Development) 2005 (ICAC Report, 2010) 4; Tasmanian Integrity Commission, *Annual Report 2011–12* (Integrity Commission, 2012) 57.

201 Mal Wauchope ‘Integrity in decision making’, (2012) 29 *Public Administration Today* 34.

202 Arguably, the closest Australia has come to establishing this type of body was the Resources Assessment Commission under the *Resources Assessment Commission Act 1989* (Cth) (repealed). The Resources Assessment Commission was able to undertake inquiries into matters on reference from the relevant Minister. Its tasks included providing advice on natural resources uses and environmental impacts arising from those uses.

203 Phillip Coorey, ‘Voters support a national ICAC’, *Australian Financial Review* (Australia) 30 March 2016.

204 Australian Parliament, *Select Committee on the establishment of a National Integrity Commission* <http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Establishment_of_a_National_Integrity_Commission>.

205 In 2015, the Supreme Court of the Philippines heard a petition brought on behalf of resident marine mammals in the Tañon Strait by two individuals acting as legal guardians and stewards of the marine mammals: *Resident Marine Mammals of the Protected Seascape Tañon Strait v. Secretary Angelo Reyes*, GR No 180771 (21 April 2015).

206 Parliamentary Commissioner for the Environment, *New Zealand Parliamentary Commissioner for the Environment (Te Kaitiaki Taiao a te Whare Paremata)* <<http://www.pce.parliament.nz/>>.

207 Environmental Commissioner of Ontario, *Environmental Commissioner of Ontario* <<https://eco.on.ca/>>.

208 See also Wales’ Future Generations Commissioner, Welsh Government, *Well-being of Future Generations (Wales) Act 2015* (08 August 2016) <<http://gov.wales/topics/people-and-communities/people/future-generations-act/?lang=en>>.

backing, including, variously, status as parliamentary officers,²⁰⁹ and functions and powers underpinned by an *Environmental Bill of Rights*.²¹⁰ Although Australia, in particular Victoria and the ACT, has experience with establishing ‘sustainability commissioners’ and similar bodies, these commissions typically do not have full integrity functions. They are principally reporting and advisory bodies – reporting on the state of the environment and/or environmental programs and provide non-binding advice to government.²¹¹ The ACT Commissioner’s integrity functions are more advanced, with the ability to conduct investigations into complaints about the government’s management of the environment or the operations of an environment agency.²¹² Importantly, there is no such body at the national level in Australia.

An example of a strong environmental integrity body is the Canadian Commissioner of the Environment and Sustainable Development (CESD). The CESD was established in 1995 within the Canadian Auditor-General’s office and is responsible for (among other things) monitoring the sustainable development strategies of federal agencies and auditing the government’s management of environment and sustainability issues.²¹³

Some of the practical benefits from having a body that can conduct independent reviews and audits, include improvement to individual decision-making, public reporting of integrity reviews and audits hold governments to account, and recommendations for systemic reform in decision-making.²¹⁴

The 2009 Hawke Review of the *EPBC Act* called for the establishment of a National Environment Commission, and concluded that the establishment of such an independent advisory and review body would help to ensure the rigour, transparency and accountability of decision-making and more robust administration of the Commonwealth environmental laws.²¹⁵ Although some of these functions can be performed by the Australian National Audit Office (ANAO), environmental audits are conducted by that office very rarely – only three audits have been conducted of the *EPBC Act* in 16 years. These were very narrow in scope.²¹⁶ Environment and sustainability is such a significant area of law and management that it is not possible for the ANAO to conduct the number of audits and reviews required to ensure full integrity.

7.1 Conclusions and recommendations

Australia can increase the quality and integrity of its environmental decision-making and environmental management by increasing integrity mechanisms specifically aimed at the environment. This could be in the form of a National Environment Commission, which has responsibility for strategic auditing of decisions and actions under national environmental laws (that is, a strategic review of decisions, not a review of every individual decision), audits of plans, policies and procedures to ensure they are meeting their environmental objectives, and audits of the Commonwealth’s interaction with states on environmental management to ensure it is effective.

A dedicated National Environment Commission would develop the knowledge and expertise to understand the intricacies of environmental decision making and management and have the capacity to conduct the required number of audits and reviews. A National Environment Commission could also be given a number of other complementary functions to enhance the implementation of Australia’s environmental laws.

209 *Environment Act 1986* (NZ) pt 1.

210 *Environmental Bill of Rights*, SO 1993, c 28, pt III.

211 See for example, *National Resources Commission Act 2003* (NSW); *Commissioner for Sustainability and the Environment Act 1993* (ACT); *Commissioner for Environmental Sustainability Act 2003* (Vic).

212 *Commissioner for Sustainability and the Environment Act 1993* (ACT).

213 Office of the Auditor General of Canada, *Who We Are* <http://oag-bvg.gc.ca/internet/English/au_fs_e_370.html#Commissioner>.

214 Environment Defenders Office Victoria, *A proposal for the establishment of a national environment commission* (2013) <<https://envirojustice.org.au/major-reports/our-proposal-for-a-national-environment-commission>>.

215 Hawke Review, above n 100.

216 A list of ANAO’s audits can be found on its website: Australian National Audit Office, *Australian National Audit Office* <<http://www.anao.gov.au>>.

8. Conclusions on democracy and the environment

Democratic practice and procedure have a distinct and crucial role in the task of environmental governance. How the relationship of humans and the environment is perceived – and humans with each other and their institutions – is basic to how this democracy should be understood and how it ought to be reformed in order best to meet the goals, objectives and needs of safe and just operating spaces for humanity. In addition to the democratic analogy of the social contract, governance and stewardship of the environment can be considered as much about the common wealth of nature held on trust for the benefit of all humanity and, indeed, for the integrity of nature itself. It is an imperfect analogy – ecological systems do not necessarily sit well with the idea of being property, the object of human use and benefit, as fungible goods and services – but implicit in the analogy are human institutions and actors as fiduciaries, as stewards, as well as citizens, from which flows strict standards and obligations of participation, justice and accountability, and rights to environmental integrity for both the environment itself and for the communities whose well-being, identity and even existence is intimately tied to that integrity. Environmental democracy is a democracy of this common wealth of nature and of the norms and values attached to it.

Australia has taken significant strides over several decades to build democratic practices and institutions around environmental governance. This has included wide-ranging recognition and protection of environmental values and systems. It has included advances in procedural rights and protections, including through use of the law to defend and protect the environment and the establishment of specialist environmental institutions. It has included emerging areas of law and practice for the inter-operation of Aboriginal rights, revision of historic injustices, and improved environmental governance. It has included a progressive, if halting, adjustment in the focal point of environmental management from human disposition and utility to the needs and character of natural systems. But this environmental democracy contains prolific gaps, limits, inconsistencies, questions, silences, and outright failures. If nothing else, the indicators of ongoing, indeed escalating, biodiversity and climate crises present a compelling case for the tools and frameworks of a robust and innovative democratic movement in relation to the environment. Key standards in the form of rights and norms, and accessible mechanisms to facilitate protection and flourishing of the environment, are essential to confronting the insidious spectre of crisis.

Some of the reforms proposed in this *Technical Paper* are not especially radical, but rather represent an expansion and/or rationalising of democratic practices in the sphere of environmental governance. This paper has recommended that the next generation of Australian environmental laws include the right to a safe and healthy environment, embedded in national human rights or in environmental legislation. This would bring Australia into line with most other liberal democracies. The right should encompass protection of the environment and its inherent and perceived values for present and future generations. The right should give rise to an enforceable cause of action. This paper has suggested, for instance, consideration of the Ontario *Environmental Bill of Rights* and it has also recommended broadly bringing Australia's standards of procedural environmental rights, such as access to information, expansion of public participation and access to justice, into conformity with international standards, notably those expressed in the *Aarhus Convention*. This paper has further proposed developing the practices and institutions of governmental integrity in the context of environmental management.

This paper also proposes more innovative development of the interaction between Aboriginal rights, restorative justice and environmental governance. These include *UNDRIP*, statutory land rights, use rights regimes, native title, and requirements for consultation with indigenous communities over natural resources issues.

The concept of giving legally-recognisable rights to nature itself, through a corporate personality or otherwise, appears to be emerging from the realm of hypothesis to practice and legislation in several jurisdictions overseas. If Australia were to explore those innovations and consider how they can be adapted and situated here within the body of environmental law and governance, this could provide a powerful narrative for the protection of natural places or objects, in which the public imagination of nature and the legal mechanisms for its protection could more readily coincide.

Finally, the Australian Government needs to embed and institutionalise public integrity mechanisms within

environmental governance and decision-making on a national level. This paper, and others in this series, propose the establishment of a National Environment Commission with broad oversight duties and powers to undertake and lead this work. Such a model is crucial to delivering accountability and legitimacy in environmental decision-making and performance.

These proposals for reform of democracy and the environment are not intended to be exhaustive of how Australian democracy can best serve the tasks of environmental governance, but perhaps they establish a general framework from which further thinking, debate, experiments, reform and critique can proceed.

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