

Environmental Defenders Office

6 December 2019

# **ISSUES PAPER: CLIMATE CHANGE IN WA**

# **SUBMISSIONS**

## **EXECUTIVE SUMMARY**

Western Australia's (**WA**) new State Climate Change Policy should proactively and effectively respond to climate change by driving reductions in greenhouse gas emissions (**emissions**) and strengthening resilience to climate impacts and should reflect contemporary climate science and the urgent action that is required to achieve the objectives of the Paris Agreement. It should provide a whole-of-economy roadmap, pathway and plan to reducing emissions and transitioning to a resilient, low-carbon economy. Specifically, it should:

- Include state-based mitigation targets:
  - A long-term target of achieving net-zero emissions by at least 2050
  - An emissions reduction target or interim emissions reduction targets
  - A target to substantially reduce emissions from electricity, such as renewable energy target (**RET**) and supporting incentive mechanisms
- Commit the WA Government to developing and implementing whole-of-government strategies and action plans for government bodies, businesses and community to achieve these targets;
- Support collaborative climate action and initiatives by government bodies, businesses and the community;
- Ensure that climate change is embedded in government decision-making (in particular, policies, programs, regulations and procedures);
- Support carbon offset and sequestration measures;
- Reflect the principles of ecologically sustainable development; and
- Ensure a just transition to a low-carbon economy.

## BACKGROUND

WA is the only Australian state with rising greenhouse gas emissions, largely due to the expansion of Liquefied Natural Gas (**LNG**) production and export, drawing on conventional gas resources.<sup>1</sup> Despite this, WA's current policy framework in relation to climate change and renewable energy is grossly inadequate compared to other Australian states and territories, resulting in WA lagging behind the rest of Australia in reducing emissions and transitioning to a low-carbon economy.<sup>2</sup> WA is the only

<sup>&</sup>lt;sup>1</sup> Bill Hare et al, Western Australia's Gas Gamble – Implications of Natural Gas Extraction in WA, (Research Report, Climate Analytics, March 2018) 8.

<sup>&</sup>lt;sup>2</sup>Louis Brailsford, Andrew Stock, Greg Bourne, Petra Stock, *Powering Progress: States Renewable Energy Race*, (Research Report, Climate Council, 2018) 16.

Australian state or territory except New South Wales (NSW) without an emissions reduction target or RET.

On 4 September 2019 the Government of Western Australia (WA Government) released its Issues Paper on Climate Change in Western Australia (Climate Issues Paper) for public consultation to inform the development of the new State Climate Policy.

The Environmental Defender's Office Western Australia (EDOWA) is a community legal centre dedicated to protecting the environment. Our submissions focus on the legal responsibility of the WA Government to take effective climate action and provide recommendations for legal and policy initiatives that should be included in the new State Climate Policy. We consider that strong initiatives to address emissions do not only have environmental benefits, but by mitigating and adapting to climate change, they will also have positive economic and health co-benefits in WA.

#### SCIENTIFIC BACKGROUND

The Intergovernmental Panel on Climate Change (IPCC) Special Report on Global Warming of 1.5°C emphasises the importance of limiting global temperatures to 1.5°C in its . It also reports that rapid and far-reaching transitions in all sectors including energy, land and infrastructure and deep emissions reductions are required to achieve this. The serious nature of climate change and the necessity for urgent and effective climate action is also reflected by 1,180 jurisdictions around the world, including over 70 Australian local governments, declaring a 'climate emergency'.<sup>3</sup>

## WA'S GREENHOUSE GAS EMISSIONS

WA is the only Australian jurisdiction to have experienced a substantial increase (27%) in greenhouse gas emissions between 2000 and 2016, and has the second highest per capita emissions of all Australian states and territories, with emissions per capita well above those of other developed economies, including resource-based economies such as Canada.<sup>4</sup> It is estimated that emissions from fossil fuel use for energy and industry account for 89% of WA's emissions.<sup>5</sup> The Climate Issues Paper acknowledges that WA is contributing 17% to Australia's greenhouse gas emissions.

The international climate change expert group Climate Analytics reports that the increase in WA's emissions is largely due to the expansion of LNG production and export, drawing on conventional gas resources.<sup>6</sup> Reputex estimates that these LNG projects will increase WA's emissions about 44% above 2005 levels.<sup>7</sup> Climate Analytics has estimated the domestic emissions that could result from the development of all conventional LNG reserves to be approximately 40-75% above what WA's energy sector could emit in accordance with Paris Agreement.<sup>8</sup>

CURRENT AND FUTURE CLIMATE IMPACTS

<sup>&</sup>lt;sup>3</sup> Climate Emergency Declaration, Climate Emergency Declarations in 1,216 Jurisdictions and Local Governments Cover 798 Million Citizens (Webpage, 3 December 2019) <a href="https://climateemergencydeclaration.org/climate-emergency-declarations-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-million-cover-15-mi citizens>.

Environmental Protection Authority, Mitigating Greenhouse Gas Emissions, (Withdrawn Technical Guidance, March 2019) 3.

<sup>&</sup>lt;sup>5</sup> Ursula Fuentes et al, A 1.5 'C Compatible Carbon Budget for Western Australia (Research Report, Climate Analytics, November 2019) 2. <sup>6</sup> Hare et al (n 1) 23.

<sup>&</sup>lt;sup>7</sup> RepuTex Energy, Offsetting Emissions from Liquefied Natural Gas Projects in Western Australia (Research Report, 26 November 2018) 8. <sup>8</sup> Hare et al (n 1) 2.

Climate impacts are a reality and are already being experienced globally and in WA. WA is particularly vulnerable to the impacts of climate change. The Climate Issues Paper recognises this, stating that WA's South West region has been "impacted by climate change more than almost any other place on the planet".<sup>9</sup> Dr Belinda Robson, Associate Professor in Environmental and Conservation Sciences at Murdoch University, also notes that South West WA has been experiencing the severe impacts of climate change for several decades, mostly expressed in declining rainfall, but also affecting surface and groundwater levels.<sup>10</sup> Dr Robson states that these are not 'predicted' changes, but actual, large, documented impacts.

#### **CURRENT WA POLICY**

#### **CLIMATE POLICY**

The WA Government climate strategy, *Adapting to our Changing Climate*, was published in October 2012. Given it was published 7 years ago, it is in urgent need of reform to reflect contemporary climate science and circumstances. We therefore strongly welcome the WA Government's commitment to developing a new State Climate Policy.

On 28 August 2019, the WA Government released its *Greenhouse Gas Emissions Policy for Major Projects* that includes an aspiration of net zero emissions by 2050. This policy applies specifically to government decision-making for projects that are assessed by the Environmental Protection Authority (**EPA**), however, and does not constitute a formal or whole-of-government climate policy. Further, the net zero emissions target is aspirational and is not supported by any strategies or action plans to provide pathways to its achievement.

WA's current policy also acknlowledges the Australian government's emissions reduction target of reducing its 2005 emissions by 26-28% by 2030. This target has been criticised as being insufficient to reach the goals of the Paris Agreement<sup>11</sup> and the UNEP in its recent Emissions Gap Report reveals that Australia is not on track the target. To this end, the UNEP states:

"There has been no improvement in Australia's climate policy since 2017 and emission levels for 2030 are projected to be well above the NDC target."<sup>12</sup>

#### **RENEWABLE ENERGY POLICY**

Due to WA's location and weather it has vast, readily available renewable energy resources including solar, wind, wave, geothermal and biomass.<sup>13</sup> Further, due to its large size and spread, Western

542a7091246c&acdnat=1526799133\_bf1eb0d689eed78fd41b18e579c48bd0>.

<sup>&</sup>lt;sup>9</sup> Department of Water and Environmental Regulation, *Climate Change in Western Australia – Issues Paper* (Report, September 2019) 1. <sup>10</sup> Hare et al (n 1) 2.

<sup>&</sup>lt;sup>11</sup> Climate Action Tracker, 'Country summary', *Climate Action Tracker* (17 June 2019)

<sup>&</sup>lt;a>https://climateactiontracker.org/countries/australia/>.</a>

<sup>&</sup>lt;sup>12</sup> United Nations Environment Programme, *Emissions Gap Report 2018* (November 2018) 12.

<sup>&</sup>lt;sup>13</sup> Delphine de Babline, Tania Urmee and Jamie Ally, 'Prospects and Problems of Increasing Electricity Generation from Mid-Size Renewable Energy Production on the South-West Interconnected System (SWIS) in WA' (2012) 49 *Procedia Engineering* 57, 60 <https://ac.elscdn.com/S1877705812047698/1-s2.0-S1877705812047698-main.pdf?\_tid=1774adf5-aeae-4f3f-b0a6-

Australia has extensive space available to effectively capture these resources.<sup>14</sup> This is recognised in the Climate Issues Paper which refers to WA's "world class renewable energy sources".<sup>15</sup>

Despite this, WA is lagging behind other Australian states and territories significantly in its uptake of renewable energy and projects,<sup>16</sup> with the WA Government continuing to support gas developments and WA generating only 8.2% renewable energy statewide in 2018.<sup>17</sup> The Climate Council has reported that while WA is improving across a number of metrics and is performing relative well in relation to rooftop solar, it "could be doing much more to accelerate the transition to renewable energy".<sup>18</sup>

At the policy level, Western Australia is currently guided by the *Energy Transformation Strategy* which does not contain a RET or any other quantitative objective for decarbonising electricity generation or reducing grid emissions. This means that WA is the only Australian state (except NSW) without a state-based RET.<sup>19</sup> The policy also does not contain any market-based incentive mechanisms or schemes to support the target and investment in electricity emissions reduction or renewable energy in WA.

#### **COMPARISON TO OTHER AUSTRALIAN STATES AND TERRITORIES**

The greenhouse gas emissions reduction and RETs for each state and territory are summarised in the table and graphic below.

	ACT	VIC	QLD	TAS	NT	SA	NSW	WA
EMISSIONS REDUCTION TARGET	ACT        40%      BY        2020;      50-60%        50-60%      BY        2025;      65-75%        65-75%      BY        2030;      90-95%        90-95%      BY        2040;      100%        100%      BY        2045	15-20% BELOW 2005 LEVELS BY 2020	AT LEAST 30% REDUCTIO N IN GHGE ON 2005 LEVELS BY 2030	60% BELOW 1990 LEVELS BY 2050 (LEGISLAT ED)	-	AT LEAST 60% TO AN AMOUNT THAT IS EQUAL TO OR LESS THAN 40% OF 1990 LEVELS BY 31	-	- -
NET ZERO EMISSIONS TARGET	NET ZERO BY 2045	NET ZERO BY 2050	NET ZERO BY 2050 (LEGISLAT ED)	NET ZERO BY 2050 (ACHIEVED )	NET ZERO BY 2050	DECEMBE R 2050 (LEGISLAT ED) NET ZERO BY 2050	NET ZERO BY 2050	NET ZERO BY 2050

<sup>14</sup> Ella Weisbrot, Tim Baxter, Greg Bourne, Andrew Stock, Fiona Ivits, *State of Play: Renewable Energy Leaders and Losers* (Research Report, Climate Council of Australia, November 2019) 40 <a href="https://www.climatecouncil.org.au/wp-content/uploads/2019/12/CC\_State-Renewable-Energy-Nov-2019\_V5.pdf">https://www.climatecouncil.org.au/wp-content/uploads/2019/12/CC\_State-Renewable-Energy-Nov-2019\_V5.pdf</a>>.

<sup>15</sup> Issues Paper (n 8) IV.

<sup>16</sup> Stock, *Renewables Ready* (n 29) 35.

<sup>17</sup> Weisbrot (n 15) 9.

<sup>18</sup> Ibid 40.

<sup>19</sup> Stock, *Renewables Ready* (n 29) V.

RENEWABLE	100%	BY	50%	BY	50%	BY	100%	BY	50%	BY	75%	BY	-	-
ENERGY	2020		2030		2030		2022		2030		2025;	NET		
TARGET											100%	BY		
											2030			



#### **CLIMATE POLICY**

#### FEDERAL

Federally, Australia has committed to a target of reducing its 2005 emissions by 26-28% by 2030. This target has been criticised as being insufficient to contribute to the achievement of the Paris Agreement goals.<sup>20</sup> There is no net zero emissions target at the Federal level in Australia.

No effective Federal climate policy or pathways to achieve this target currently exist, with Australia's Emissions Reduction Fund (**ERF**) (now the Climate Solutions Fund) and safeguard mechanism, the "centrepiece" of the Australian government's policy suite to reduce emissions, not putting Australia on track to meet its target. The 17 June 2019 update on the Climate Action Tracker website reports that Australia's climate policy is further deteriorating and that Australia's emissions are set to far outpace its "insufficient" 2030 target.<sup>21</sup> The Organisation for Economic Co-operation and Development (**OECD**) describes current climate policy as a "piecemeal approach" and has warned that the Australian Government will not achieve its target without intensified mitigation efforts.<sup>22</sup>

<sup>&</sup>lt;sup>20</sup> Climate Action Tracker (n 12).

<sup>&</sup>lt;sup>21</sup> Ibid.

<sup>&</sup>lt;sup>22</sup> OECD, OECD Environmental Performance Reviews: Australia 2019 (OECD Publishing, 2019).

While the Climate Solutions Package was announced February 2019, the Climate Action Tracker states that this policy package confirms that the Commonwealth Government is not intending to implement any serious policy efforts.<sup>23</sup>

#### AUSTRALIAN STATES AND TERRITORIES

All other Australian states and territories have contemporary whole-of-government climate change policies, strategies, pathways and action plans in place. All states and territories except NT and NSW have net zero emission and emission reduction targets incorporated into formal policy. South Australia, Victoria, ACT and Tasmania have also enacted emissions reduction targets and net zero emissions targets in climate change legislation.

## RENEWABLE ENERGY POLICY

## <u>FEDERAL</u>

The principal national mechanism relating to renewable energy in Australia is the Commonwealth RET introduced in 2001 through the *Renewable Energy (Electricity) Act 2000* (Cth), which comprises two schemes: a Large-scale RET and Small-scale Renewable Energy Scheme. It aims for 33,000 gigawatt hours or 23.5% of renewable source electricity to be produced nationally by 2020<sup>24</sup> and such levels to be maintained until 2030.<sup>25</sup> In September 2019, the Clean Energy Regulator announced that Australia had met the LRET more than a year ahead of schedule.<sup>26</sup> However, the RET has been criticised for being "weak"<sup>27</sup> and the Climate Change Authority reports that it is not in line with the level of action required to effectively tackle climate change and achieve Australia's international obligations under the Paris Agreement.<sup>28</sup>

The Commonwealth government announced in October 2017 that, beyond 2020, the RET will be replaced by a National Energy Guarantee (**NEG**) that will bring together climate and energy policy for the first time in Australia.<sup>29</sup> Prime Minister Scott Morrison announced that the NEG was 'dead' and would not be going any further in September 2018, however, with no national energy or emission reduction policy currently existing at the Federal level.<sup>30</sup>

#### AUSTRALIAN STATES AND TERRITORIES

All Australian states and territories except Western Australia and NSW have state-based RETs incorporated in policy or legislation. All state RETs are more ambitious than the Commonwealth RET.<sup>31</sup> State RETs are often enacted through legislation and supported by market-based schemes or mechanisms such as reverse auction and feed-in tariff schemes that ensure the RETs are achieved and stimulate investment in renewable energy. As stated in the Northern Territory's Roadmap to

<sup>&</sup>lt;sup>23</sup> Climate Action Tracker (n 12).

<sup>&</sup>lt;sup>24</sup> Stock, *Renewables Ready* (n 29) 38.

<sup>&</sup>lt;sup>25</sup> Hon Ben Wyatt, 'New renewables projects in WA given 'green light' (Media Statement, 10 April 2018)

<sup>&</sup>lt;sup>26</sup> Clean Energy Council, ' Renewable Energy Target', *Renewable Energy Target* (Web Page)

<sup>&</sup>lt;a href="https://www.cleanenergycouncil.org.au/advocacy-initiatives/renewable-energy-target">https://www.cleanenergycouncil.org.au/advocacy-initiatives/renewable-energy-target</a>.

 <sup>&</sup>lt;sup>27</sup> Katharine Murphy, 'States' won't compromise' on reneable targets as energy fight looms', *The Guardian* (online) 19 April 2018 < https://www.theguardian.com/australia-news/2018/apr/19/labor-states-wont-compromise-on-renewable-targets-as-energy-fight-looms>.
 <sup>28</sup> Stock, *Renewables Ready* (n 29) 38.

<sup>&</sup>lt;sup>29</sup> Prudence Anderson, 'Commonwealth Government Announces a National Energy Guarantee' (Media Release, 17 October 2017) <a href="https://www.aemc.gov.au/news-centre/media-releases/commonwealth-government-announces-a-national-energs">https://www.aemc.gov.au/news-centre/media-releases/commonwealth-government-announces-a-national-energs</a>.

<sup>&</sup>lt;sup>0</sup> Guardian Staff, 'Scott Morrison says national energy guarantee 'is dead'', *The Guardian* (Online, 8 September 2018

<sup>&</sup>lt; https://www.theguardian.com/australia-news/2018/sep/08/scott-morrison-says-national-energy-guarantee-is-dead>.

<sup>&</sup>lt;sup>31</sup> Stock, *Renewables* Ready (29) 38.

Renewables Report, states and territories through "consistent policy support, renewable energy incentive schemes and effective complementary planning legislation have attracted the bulk of renewable energy investment in Australia to date".<sup>32</sup>

As addressed above, state and territory RETs have therefore been commended for driving the energy transition<sup>33</sup> in the absence of an effective national policy, and for being more commensurate with the level of action and renewable energy required to achieve Australia's obligations under the Paris Agreement.<sup>34</sup> In a recent report, the Climate Council states that state and territory leadership is vital in the face of Federal Government inaction if Australia is to take strong action on climate change.<sup>35</sup>

#### **SUB-NATIONAL CLIMATE ACTION**

Sub-national governments (including state and local governments) are recognised as key actors in addressing climate change,<sup>36</sup> at the forefront of climate action,<sup>37</sup> and as "laboratories for the innovation and development of low carbon technology and policies".<sup>38</sup> Local governments are also considered well placed to deliver climate action to local communities.<sup>39</sup> While sub-national governments are not able to implement policies at a Federal level, they are uniquely suited to taking climate mitigation and adaptation action and contributing to national action on climate change. Climate action by sub-national government often exceeds, or in some cases even precedes, action by national governments.<sup>40</sup> The IPCC has therefore referred to sub-national governments as "powerful agents of climate action"<sup>41</sup> that can succeed either "by implementing climate objectives defined at higher government levels or by taking initiative autonomously."<sup>42</sup> For example, several states in the United States have pledged themselves to meeting the country's emissions targets without the Federal Government following the US President's withdrawal from the Paris Agreement.<sup>43</sup>

Here in Australia, state governments have tended to precede national policy in environmental issues, and the majority of climate action has come from state and local governments.<sup>44</sup> As discussed above, adaptation to climate change is heavily site dependent,<sup>45</sup> making the closer proximity of state governments' to areas at risk of climate impacts greater suited to engaging with and forming new disaster and risk management tools.<sup>46</sup> This is acknowledged in the Issues Paper, which states that "the State Government has a pivotal role in supporting resilience through its

chttps://www.adaptation-undp.org/sites/default/files/downloads/tacc\_-\_down\_to\_earth\_-\_donor\_proposal\_2010-11.pdf>.

<sup>&</sup>lt;sup>32</sup>Alan Langworthy et al, *Roadmap to Renewables* (Report, Northern Territory Government, September 2017) 68.

<sup>&</sup>lt;sup>33</sup> Stock, *Renewables* Ready (29) II.

<sup>&</sup>lt;sup>34</sup> Ibid 38.

<sup>&</sup>lt;sup>35</sup> Weisbrot (n 15) 6.

<sup>&</sup>lt;sup>36</sup> United Nations Development Programme, Down to Earth: Territorial Approach to Climate Change (Proposal, 2010) 15

<sup>&</sup>lt;sup>37</sup> Network of Regional Governments for Sustainable Development, *Subnational Governments at the Forefront of Climate Action* (Report, 2010) 15.

 $<sup>^{38}</sup>$  Down to Earth (n 23) 6.

 <sup>&</sup>lt;sup>39</sup> Judith Preston and Jennifer Scott, 'Meeting the climate change challenge in local government decision-making with the use of sustainable climate change adaptation modelling,' (2012) 17 *Local Government Law Journal* 135, 138.
 <sup>40</sup> Graham Pearce and Stuart Cooper, 'The challenges of delivering climate change policy at the sub-national level' (2013) 84(4) *The Town*

<sup>&</sup>lt;sup>40</sup> Graham Pearce and Stuart Cooper, 'The challenges of delivering climate change policy at the sub-national level' (2013) 84(4) *The Town Planning Review* 419, 421.

<sup>&</sup>lt;sup>41</sup> Intergovernmental Panel on Climate Change, Special Report: Global Warming of 1.5°C (Report, 2018) 473.

<sup>&</sup>lt;sup>42</sup> Ibid 354.

<sup>&</sup>lt;sup>43</sup> Petra Stock, Andrew Stock, David Alexander, Greg Bourne, *Renewables Ready: States Leading the Charge* (Report, Climate Council, 2017) 1.

<sup>&</sup>lt;sup>44</sup> Jacqueline Peel, 'Climate Change Law: The Emergence of a New Legal Discipline,' (2008) 32(3) *Melbourne University Law Review* 922, 943.

<sup>&</sup>lt;sup>45</sup> *Down to Earth* (n 23) 6.

<sup>&</sup>lt;sup>46</sup> John Watson, 'Practical precautions, reasonable responses: How South Australia's planning regime adapts to the coast impacts of climate change' (2015) 32 *Environmental and Planning Law Journal* 256, 257.

responsibility for land use and transport planning, and provision of public infrastructure, emergency management...".47

The Climate Council reveals that "State and territory targets, plus existing and announced coal closures (such as Liddell Power Station) are expected to deliver the Federal government's 2030 emissions reduction target of 26-28% reduction on 2005 levels, even without any action from the Federal Government".48

Some participants in the discussion argue, however, that responding to climate change is the responsibility of the Commonwealth government, not state and territory governments. While we acknowledge that a national policy approach to emission reductions and climate change is essential and that it is preferable for the Commonwealth government to take a leading role in relation to climate action and achieving Australia's international obligations, in the absence of an effective national regime, State regulation is necessary to reduce WA's rising emissions. To this end, the Climate Issues Paper states that a "nationally consistent, economy-wide market mechanisms are better able to reduce our greenhouse gas emissions at least cost to the economy", but acknowledges the difficulties associated with developing a stable national climate policy over the last decade and states that "Western Australia won't wait on the Australian Government".<sup>49</sup> The EPA similarly stated in its withdrawn Technical Guidance that "in the absence of effective national mechanisms, a greater share of the burden will fall to regulators in state and territory jurisdictions".50

As addressed above, currently no effective national regulation or policy exists that is capable of reducing Australia or WA's emissions, with the current Commonwealth regime being criticised as being insufficient.<sup>51</sup> The Issues Paper acknowledges this, stating that "Australia's greenhouse gas emissions have been rising, and almost one third of safeguard mechanism facilities have applied to increase their baselines".<sup>52</sup> While joint action between State governments and the Federal government is undoubtedly the most effective course of climate action,<sup>53</sup> States cannot afford to wait while the Federal government insists on a "business as usual" approach to climate policy,<sup>54</sup> setting targets that it is both unable to reach<sup>55</sup> and are inadequate to prevent climate catastrophe.<sup>56</sup>

#### **LEGAL ISSUES**

#### CONSTITUTIONAL ISSUES

Under the Australian Constitution, both the Commonwealth and state and territory governments have powers relating to the environment. While the High Court has recognised that the Federal government has the power to implement international treaties (such as the Paris Agreement) under

<sup>&</sup>lt;sup>47</sup> Issues Paper (n 8) 4.

<sup>&</sup>lt;sup>48</sup> Stock, *Renewables* Ready (n 29) II.

<sup>&</sup>lt;sup>49</sup> Issues Paper (n 8) iv.

<sup>&</sup>lt;sup>50</sup> Environmental Protection Authority, *Mitigating Greenhouse Gas Emissions*, (Withdrawn Technical Guidance, March 2019), 3.

<sup>&</sup>lt;sup>51</sup> Climate Action Tracker (n 11).

<sup>&</sup>lt;sup>52</sup> Issues Paper (n 8) 3.

<sup>&</sup>lt;sup>53</sup> Hari Osofsky and Jacqueline Peel, 'The role of litigation in multilevel climate change governance: Possibilities for a lower carbon future?' (2013) 30 Environmental and Planning Law Journal 303.

<sup>&</sup>lt;sup>54</sup> Judith Preston and Jennifer Scott, 'Meeting the climate change challenge in local government decision-making with the use of sustainable climate change adaptation modelling,' (2012) 17 Local Government Law Journal 135, 136. <sup>55</sup> United Nations Environment Programme, *Emissions Gap Report 2018* (Report, 27 November 2018) 8.

<sup>&</sup>lt;sup>56</sup> Climate Council of Australia, Climate Cuts, Cover-Ups and Censorship (Report, 7 April 2019) 12.

the "external affairs" power,<sup>57</sup> protection of the environment has historically been the primary responsibility of state and territory governments.<sup>58</sup>

Section 109 of the Australian Constitution provides that state laws are invalid to the extent that they are inconsistent with Federal laws, that is, where the two laws are not capable of operating concurrently. This may apply where climate change policies are contained in or supported by state and Federal legislation. For example, state governments could not implement policies through legislation that is inconsistent with Federal legislation such as the *Carbon Credits (Carbon Farming Initiative) Act 2011* (Cth) (which implements the Climate Solutions Fund/Emissions Reduction Fund).<sup>59</sup> Given the current lack of Federal regulation and policy relating to climate change, however, climate action by state and territory governments is unlikely to result in inconsistency.

State and territory governments are not prevented from taking action that is more ambitious than action by the Commonwealth government, provided it does not result in inconsistency. This is demonstrated by all other Australian states and territories having emissions reductions targets and/or RETs that are more ambitious than Commonwealth targets.<sup>60</sup> For example, Victoria has enacted climate change legislation that commits the state to a net-zero emissions target by 2050<sup>61</sup> and other emissions reduction targets that exceed the Commonwealth climate policy and target.<sup>62</sup> South Australia has also legislated an emissions reduction target of 60% below 1990 levels by 2050,<sup>63</sup> which significantly exceeds the Commonwealth target.<sup>64</sup> Even certain Australian local governments have set zero-emissions or RETs that exceed the Federal targets.<sup>65</sup>

Accordingly, the WA Government can and should take effective climate action by establishing a state policy on climate change. WA's new State Climate Change Policy can be more ambitious than Federal climate policy and targets and should adopt a robust and proactive approach to climate mitigation.

#### COMPLEMENTARITY WITH FEDERAL REGULATION AND POLICY

State and territory laws and policies in relation to climate change are encouraged to be complementary to Federal laws and policies<sup>66</sup> in order to ensure climate action taken at all levels of government is cohesive, consistent and cost-effective. The Council of Australian Governments' (**COAG**) complementarity policy related to the carbon price mechanism and refers to developing a national approach to assessing the complementarity of existing and future climate change mitigation measures with the carbon price mechanism and Carbon Pollution Reduction Scheme (**CPRS**), to ensure they work cohesively. Complementary measures can target a market failure in a sector not

<sup>&</sup>lt;sup>57</sup> Australian Constitution s 51(xxix); *Commonwealth v Tasmania* (1983) 158 CLR 1.

<sup>&</sup>lt;sup>58</sup> Daniel Goldsworthy, 'Re-stumping Australia's Constitution – A Case for Environmental Recognition,' (June 2017) 4 Australian Journal of Environmental Law 54, 64.

<sup>&</sup>lt;sup>59</sup> Commonwealth of Australia Constitution Act 1901 (Cth), s109.

<sup>60</sup> Climate Action Tracker, 'Australia: Country Summary', Climate Action Tracker (Web Page)

<sup>&</sup>lt;https://climateactiontracker.org/countries/australia/>. 61 Climate Change Act 2017 (Vic) s 6.

<sup>&</sup>lt;sup>62</sup> Ibid s 10.

<sup>&</sup>lt;sup>63</sup> Climate Change and Greenhous Emissions Reduction Act 2007 (SA) s 5.

<sup>&</sup>lt;sup>64</sup> Department of the Environment and Energy, *Australia's 2030 Emissions Reduction Target* (Report, 2015) 1.

<sup>&</sup>lt;sup>65</sup> Climate Council, Local Leadership: Tracking Local Government Progress on Climate Change (Report, 2017) III.

<sup>&</sup>lt;sup>66</sup> Jacqueline Peel, 'Climate Change Law: The Emergence of a New Legal Discipline,' (2008) 32(3) *Melbourne University Law Review* 922, 943.

covered by the carbon price, or sectors where the market price is insufficient to overcome the market failures that prevent the take up of cost effective abatement.<sup>67</sup>

The carbon price mechanism and CPRS no longer exist in Australia following the repeal of the *Clean Energy Act 2011* (Cth) in 2014.<sup>68</sup> While the complementarity policy still applies, no price-based mechanism currently exists in Australia for state or territory mitigation measures to be 'complementary' to. In any event, WA's State Climate Change Policy can be developed in a way that is complementary to, and capable of operating concurrently with, Commonwealth policies and regulation. It can also be flexible and responsive to changes at the Federal level to address concerns relating to inconsistency and duplication in the event that a national market-based mechanism is introduced that renders the WA Government's policy non-complementary.

In the meantime, we emphasise the importance of an effective state policy given the current vacuum of climate legislation and policy at the national and State levels capable of achieving emissions reductions.

#### HINDERING AUSTRALIA'S INTERNATIONAL OBLIGATIONS

The Climate Issues Paper refers to Australia's commitments under the Paris Agreement to reducing greenhouse gas emissions to limit global warming to well below 2° above pre-industrial levels and actions to enhance adaptive capacity, strengthen resilience and reduce vulnerability to climate change. Australia's Paris Agreement target of a 26-28% reduction in emissions below 2005 levels has been criticised as being insufficient to achieve the goals under the Paris Agreement.<sup>69</sup> Australia is also not on track to meet this insufficient target, with its emissions continuing to increase.<sup>70</sup>

In order for WA to contribute to Australia's efforts in reducing its emissions and achieving its obligations under the Paris Agreement, emissions need to decrease, not increase. Despite this, the Climate Issues Paper expressly acknowledges that "new resource sector proposals are likely to drive increases to Western Australia's emissions in the short term".<sup>71</sup> We propose that by allowing and encouraging this increase in emissions, the approach proposed in the Climate Issues Paper is inconsistent with WA's net zero emissions target and the objectives of the Paris Agreement, and will hinder Australia's progress in reducing its emissions and achieving its international obligations.

#### **RECOMMENDATIONS FOR STATE CLIMATE POLICY**

#### **GENERAL RECOMMENDATIONS**

- 1. INCLUDE STATE-BASED MITIGATION TARGETS
  - (a) LONG-TERM NET ZERO EMISSIONS TARGET

While the WA Government's *Greenhouse Gas Emissions Policy for Major Projects* refers to a target of achieving net zero emissions by 2050, this target is aspirational and is not supported by strategies or

<sup>&</sup>lt;sup>67</sup> Denniss et al. 'Complementary Climate Change Policies: A Framework for Evaluation' (1 February 2012) 35. Available at: https://doi.org/10.1177/103530461202300103.

<sup>&</sup>lt;sup>68</sup> Clean Energy Legislation (Carbon Tax Repeal) Act 2014 (Cth).

<sup>&</sup>lt;sup>69</sup> Climate Transparency, 'Brown to Green: The G20 Transition to a Low-Carbon Economy', *Climate Transparency* (Infographic Summary) <a href="https://www.climate-transparency.org/wp-content/uploads/2019/01/BROWN-TO-GREEN\_2018\_Australia\_FINAL.pdf">https://www.climate-transparency.org/wp-content/uploads/2019/01/BROWN-TO-GREEN\_2018\_Australia\_FINAL.pdf</a>>.

<sup>&</sup>lt;sup>70</sup> Climate Action Tracker (n11).

<sup>&</sup>lt;sup>71</sup> Issues Paper (n 8) 7.

action plans to ensure it is achieved. This policy also specifically applies to government decisionmaking in relation to proposals that are assessed and approved under the EP Act, and does not constitute a whole-of-government state climate policy. While the Issues Paper states that the policy and the target "creates an overarching framework for the State Climate Policy",<sup>72</sup> this net zero emissions target should be formally embedded in the State Climate Change Policy and accompanied by detailed strategies, pathways and action plans.

Going further, WA's net zero emissions target should be enacted in state legislation. This would ensure the target is binding and embedded in government decision-making, and would provide an overarching framework to guide action on climate change in WA.

(b) EMISSIONS REDUCTION TARGET

WA is one of the only Australian states except New South Wales and the Northern Territory without an emissions reduction target incorporated in policy or legislation. Instead, the WA Government currently defers to the Federal government's emission reduction target, which has been criticised for being inconsistent with action required to achieve the objectives of the Paris Agreement. Accordingly, this target should not be used by the WA Government as a benchmark for climate action.

A state-based emissions reduction target or interim emissions reduction targets should be embedded in WA's new State Climate Change Policy that is more ambitious than the insufficient Commonwealth target and consistent with efforts required to achieve the Paris Agreement goals and to limit global warming to 1.5°C. This target will provide a framework for policies, pathways and accountability for climate action and should be enacted in legislation to ensure it is binding.

(c) RENEWABLE ENERGY OR ELECTRICITY DECARBONISATION TARGET AND SUPPORTING INCENTIVE MECHANISMS

Advancing renewable energy capacity and increasing investment in renewable energy in WA is crucial to reducing WA's emissions and transitioning to a low-carbon economy and must be addressed in the new State Climate Policy. The Climate Council reveals that WA generated 8.2% renewable energy in 2018, compared to 94.6% in Tasmania, 54.1% in the ACT and 51.2% in South Australia.<sup>73</sup>

We note that the Premier and the Minister for Environment have made statements to the effect that the WA Government will not introduce a RET in WA. If this is the Government's position, we call upon the Government to reconsider it. All Australian states and territories except WA and NSW have RETs in place, with these targets being stronger than the Commonwealth RET. In our view, WA's State Climate Change Policy should also include a RET of 100% renewables by 2050 and outline opportunities for advancing renewable energy capacity through increased investment in the use of renewable energy in WA. A state RET will establish a foundation of confidence and certainty to the market and potential renewable investors,<sup>74</sup> and drive innovative and sustainable alternatives.<sup>75</sup>

<sup>&</sup>lt;sup>72</sup> Issues Paper (n 8) 3.

<sup>&</sup>lt;sup>73</sup> State of Play (n 95) 10.

<sup>&</sup>lt;sup>74</sup> The Clean Energy Council, Australia's Clean Energy Investment Outlook, (11 September 2019) 3.

<sup>&</sup>lt;sup>75</sup> James Prest and Grace Soutter, 'The Future of Australia's Federal Renewable Energy Law' (2018) 92 Australian Law Journal 799, 810.

The importance of a RET in providing certainty and confidence is demonstrated by the success of the Commonwealth RET. While the Large-scale RET created "unprecedented levels of investment" over the last two years in 2017 and 2018, the lack of targets beyond 2020 have led to a decrease in investment commitments in 2019.<sup>76</sup> The Clean Energy Council also contends that State Governments are crucial in providing policy leadership to underpin investment confidence and new investment and that RETs are the "preferred approach" in the face of Federal uncertainty.<sup>77</sup> In Victoria the *Renewable Energy (Jobs and Industry) Act 2017* (Vic) contains RETs, supports schemes, projects and initiatives to achieve their targets and encourage investment, employment and technology development in Victoria.<sup>78</sup> According to the 2017-18 Progress Report for the Victorian RET, the Victorian Government increased market confidence by legislating the RETs and delivering competitive renewable energy projects through the VRET 2017 Reverse Auction, while also attracting investment and jobs in the State.<sup>79</sup>

We also note that a framework could be established to achieve emissions reductions in the electricity sector that uses legislated targets and incentive mechanisms but does not take the form of a formal RET and is not limited to renewable energy generation (such a framework could also allow for efficiency and demand side measures, for example).

2. COMMIT WA GOVERNMENT TO DEVELOPING AND IMPLEMENTING WHOLE-OF-GOVERNMENT STRATEGIES AND ACTION PLANS

The new State Climate Change Policy should require the development and implementation of wholeof-government strategies and specific action plans to support and achieve the targets, objectives and initiatives included in the State Climate Policy.

The State Climate Change Policy should commit the WA Government to developing and implementing a separate whole-of-government adaptation strategy and action plans to address adaptation and resilience to climate change impacts. Legislation should be introduced that requires a state-wide adaptation strategy and tailored action plans for relevant sectors and systems – including community health and wellbeing, water, industry, waste, energy, agriculture, emergencies, biodiversity, transport, infrastructure, coastal management and disaster and emergency management (including plans for particular impacts such as droughts, flooding and bushfires). These action plans will provide a targeted, comprehensive and coordinated response to climate change in WA and systems-based planning that reflects the different characteristics of different sectors and systems. They will also facilitate each sector to contribute to reducing WA's emissions and strengthening adaptive capacity. The legislation should also embed and integrate consideration of climate change adaptation and risks into government decision making and planning through new policies or reforms.

For example, the *Climate Change Act 2017* (Vic) requires adaptation action plans to be developed by relevant Ministers every five years covering the following systems: built environment (infrastructure); education and training; health and human services; natural environment

<sup>&</sup>lt;sup>76</sup> Ibid 2.

<sup>&</sup>lt;sup>77</sup> Ibid 9.

<sup>&</sup>lt;sup>78</sup> Renewable Energy (Jobs and Industry) Act 2017 (Vic) s 7.

<sup>&</sup>lt;sup>79</sup> Victoria State Government Department of Environment, Land, Water, and Planning, 'Victorian Renewable Energy Target' (Report, 2017) 14.

(biodiversity); primary production (agriculture); transport; and the water cycle. The legislation requires adaptation action plans to contain a statement of the roles and responsibilities of decision makers across the system; the outcome of 'gap analysis' to avoid duplication; and a list of actions (if any are required) to address any shortcomings identified in the gap analysis.

# 3. SUPPORT COLLABORATIVE CLIMATE ACTION AND INITIATIVES BY GOVERNMENT BODIES, BUSINESSES AND THE COMMUNITY

The new State Climate Change Policy should encourage partnerships and ongoing collaboration between the State government, local governments, businesses and communities in relation to climate mitigation and adaptation action. The State government can support collaborative and innovative initiatives aimed at reducing carbon emissions and adapting to climate change by removing regulatory barriers, providing funding for local and regional programs, and introducing incentive mechanisms to encourage these initiatives. For example:

- Targeted funding and investment for research and development and local governments/community groups to support on the ground action and innovative solutions
- Public education programs to inform the WA public on how to reduce emissions and adapt to climate change through efficient energy and water use, recycling etc...
- Incentives to encourage private investment and participation of businesses and the community in the transition and innovative solutions

The WA Government could further encourage collaborative action and partnerships by introducing legislation that contains provisions providing and recognising voluntary agreements and programs.

## 4. ENSURE CLIMATE CHANGE IS EMBEDDED IN GOVERNMENT DECISION-MAKING

The State Climate Change Policy should ensure that climate change considerations are embedded in government decision-making (policies, programs, regulations and procedures) and that government documents account for climate impacts and adaptation needs. Ideally this would involve introduction of legislation that outlines climate change considerations, objectives and principles that must be considered by decision-makers.

Amendment of existing WA legislation such as the *Environmental Protection Act 1986* (WA) (**EP Act**), the *Planning and Development Act 2005* (WA) (**P&D Act**), *Rights in Water and Irrigation Act 1914* (WA) (*RIWI Act*), *Biodiversity Conservation Act 2016* (WA) (*BC Act*), *Mining Act 1978* (WA), and *Petroleum and Geothermal Energy Resources Act 1967* (WA) would also be required to expressly require decision-makers to consider climate change mitigation and adaptation considerations in discharging their functions under these Acts.

## 5. SUPPORT CARBON OFFSET AND SEQUESTRATION MEASURES

'Carbon sinks' or sequestration/storage of carbon dioxide in trees or soils present opportunities to reduce WA's greenhouse gas emissions. The Issues Paper acknowledges that expanding carbon farming industry is seen as integral to achieving emissions reductions and that carbon farming also presents opportunities for collaboration with regional, remote indigenous communities to increase their economic prosperity (jobs).

The new State Climate Change Policy should support carbon offset and sequestration measures, programs and opportunities such as carbon farming, soil carbon, blue carbon and geosequestration

through the development of a targeted strategy similar to South Australia's *Carbon Sequestration Strategy*. Carbon offset measures could be further encouraged by legislative provisions that provide for and recognise voluntary programs or agreements for carbon offset or sequestration measures.

## 6. REFLECT THE PRINCIPLES OF ECOLOGICALLY SUSTAINABLE DEVELOPMENT

Section 4A of the EP Act outlines its objective of protecting WA's environment and sets out internationally recognised principles often referred to as the principles of ecologically sustainable development (**ESD Principles**). The EP Act directs decision-makers including the WA Government to have regard to these principles in administering the Act and discharging their functions and obligations, including environmental impact assessment, approvals and licensing – matters which often involve climate change and should be addressed in the State Climate Policy.

In our view the State Climate Change Policy should reflect and be consistent with the ESD Principles. In the context of climate change, the precautionary principle and principle of intergenerational equity are particularly important. This means that the State Climate Change Policy should:

- not use lack of full scientific certainty as a reason for postponing measures to prevent climate change, being environmental degradation with threats of serious or irreversible damage; and
- should ensure that the health, diversity and productivity of WA's environment, including a safe and liveable climate capable of supporting that health, diversity and productivity, is maintained or enhanced for the benefit of future generations.

## 7. ENSURE A JUST TRANSITION TO A LOW-CARBON ECONOMY

The new State Climate Change Policy must address and support vulnerable households and people in the community who are disproportionally affected by climate impacts and disadvantaged in their capacity to participate in climate mitigation and adaptation efforts. It can do so by including/requiring integrated vulnerability assessments and strategies to deal with vulnerability and inequalities in the community in relation to all themes relevant to climate change, discussed below.

We note that the WA Government has committed in the *Energy Transformation Strategy* to developing and implementing a 'Just Transition' plan for workers and communities that rely on the coal industry such as Collie. We support this and encourage the WA Government to ensure that this is developed and that the State Climate Change Policy reflects a just transition for all sectors.

For example, the NSW Office of Environment and Heritage has developed a process that aims to provide a sound basis for enabling regional adaptation and planning by working with local government, agencies and other local stakeholders to identify and understand regional climate vulnerabilities<sup>80</sup> and published a Guide to Integrated Regional Vulnerability Assessment (**IRVA**) for Climate Change which presents a 'how to' guide to the IRVA for climate change for various sectors including human services, infrastructure and planning, natural ecosystems, primary industry and emergency management.

#### SPECIFIC RECOMMENDATIONS – CLIMATE ISSUES PAPER THEMES

<sup>&</sup>lt;sup>80</sup> NSW Government, 'Adapting to Climate Change', *Assessing Regional Vulnerability to Climate Change* (Web Page, 2019) <a href="https://climatechange.environment.nsw.gov.au/Adapting-to-climate-change/Regional-vulnerability-and-assessment">https://climatechange/Regional-vulnerability-and-assessment</a>.

#### (a) TRANSFORMING ENERGY GENERATION

The Climate Issues Paper acknowledges that emissions from WA's South West Interconnected System (**SWIS**) have increased by 16% since 2005.<sup>81</sup> While it states that renewable energy uptake in WA has doubled since 2007, renewable energy still only provides 16% of WA's energy needs in the South West, with WA lagging behind other Australian states and territories.<sup>82</sup> WA needs to advance its renewable energy uptake, decarbonise, and electrify the energy and electricity sector in order to reduce its emissions and transition away from fossil fuels to a low-carbon economy.

We acknowledge the *Energy Transformation Strategy* which has the vision of providing safe, secure, reliable, low-emission power to Western Australian households and businesses at the lowest sustainable cost, while allowing new technology to connect and giving people more control over their electricity use.<sup>83</sup> A Distributed Energy Resources Roadmap will also be produced which the WA Government states will guide the integration of solar panels, battery storage and electric vehicles into the power system.<sup>84</sup> While we support this Strategy, in our view, it needs to do more to properly take into account the urgency of climate change and ensure that WA's energy emissions are reduced.

The transformation to low-carbon and clean energy needs to occur as soon as possible, with the IPCC Special Report highlighting that "rapid and far-reaching transitions" in energy, land industry, buildings, transport, and cities are required to limit warming to 1.5°C.<sup>85</sup>

#### Increasing Renewable Energy Uptake

A rapid increase in renewable energy and transition away from fossil fuels such as coal is required to transform the energy sector and reduce emissions. As addressed above and in the Climate Issues Paper, WA's renewable energy resources including solar, wind, wave, geothermal and biomass are world-class, vast and readily available.<sup>86</sup> The Climate Issues Paper states that these resources can "put WA's energy intensive businesses at the forefront of cleaner production trends and provide a competitive advantage in a low-carbon world".<sup>87</sup> Despite this, WA is lagging behind other Australian state and territories in relation to renewables. While WA has had an impressive uptake of rooftop solar and solar photovoltaic (PV) systems, WA needs to do much more to advance renewable energy and reduce emissions.

The Climate Issues Paper refers to barriers to renewable energy in WA such as "technical and regulatory issues" and states that they need to be managed.<sup>88</sup> The WA Government should ensure these barriers are addressed and managed by reforming state policies and legislation to remove regulatory barriers to renewable energy uptake.

The State Climate Change Policy should aim to advance and stimulate the uptake and long-term growth of low-carbon technologies such as renewable energy and hydrogen energy in WA. As addressed above, a state-based RET should be introduced in WA. This should be supported by a

<sup>&</sup>lt;sup>81</sup> Issues Paper (n 8) 5.

 <sup>&</sup>lt;sup>82</sup> Weisbrot et al (n 15).
 <sup>83</sup> Government of Western Australia Department of Treasury, *Energy Transformation Strategy* (2019).

<sup>&</sup>lt;sup>84</sup> Ibid 8.

<sup>&</sup>lt;sup>85</sup> Special Report (n 25).

<sup>&</sup>lt;sup>86</sup> De Babline, Urmee and Ally, above n 14, 60.

<sup>&</sup>lt;sup>87</sup> Issues Paper (n 8) 8.

<sup>&</sup>lt;sup>88</sup> Issues Paper (n 8) 5.

specific strategy and action plan for renewable energy similar to Victoria's *Renewable Energy Action Plan.* We acknowledge and support the *Renewable Hydrogen Strategy* referred to in the Issues Paper which aims to stimulate the renewable hydrogen industry in WA through commitment of \$10 million to a Renewable Hydrogen Fund. However, a report by the Climate Council highlights that this Strategy Hydrogen contemplates hydrogen produced from fossil fuels, which it states has no place in renewable hydrogen strategies.<sup>89</sup>

Most Australian states and territories also have specific policies and incentive mechanisms in place that support the RET and encourage renewable energy investment<sup>90</sup> ACT, Victoria and Queensland have effectively increased their uptake of renewable energy through reverse auctions supply and construction of new, large-scale wind and solar projects.<sup>91</sup> Legislation should also be introduced in WA that includes the RET and establishes incentive mechanisms such as feed-in tariff and reverse auction schemes to support the RET and the uptake of renewable energy in WA.

In the ACT, the *Electricity Feed-in (Large-scale Renewable Energy Generation) Act 2011* (ACT) supports the RET legislated in the *Climate Change and Greenhouse Gas Reduction Act 2010* (ACT) by implementing the feed-in tariff (**FiT**) and reverse auction scheme. The ACT Government states that the success of this legislation in stimulating investment in large-scale renewable energy in the ACT is demonstrated by the 2012 Solar Auction, and commends it for being the primary policy tool for attracting investment to meet the ACT's RET.<sup>92</sup>

State / Territory:	Renewable electricity (2018)	Wind & solar capacity per person (kW) (March 2019)	% solar households (Oct 2019)	Renewable energy targets	Net zero emissions targets	Highlights
SA A	51.2%	1.25	35.0%	Net 100% in the 2030s	Net zero by 2050	Aiming for 100% renewables in the 2030s. Over 50% wind and solar energy in the grid.
ACT (A)	54.1%	1.27	16.1%	100% by 2020	Net zero by 2045	On track to achieve 100% renewable energy from 1 January 2020.
TAS A	94.6%	0.60	15.1%	100% by 2022	Net zero by 2050	Aiming to support the National Electricity Market as the Battery of the Nation.
VIC ®	17.3%	0.34	17.9%	25% by 2020; 40% by 2025; 50% by 2030	Net zero by 2050	Legislated 50% renewable energy target by 2030. Greatest capacity of wind and solar projects in the pipeline.
QLD ®	8.8%	0.38	35.7%	50% by 2030	Net zero by 2050	Installed the most large-scale wind and solar per capita since last year's report.
NSW ©	17.3%	0.25	20.4%	-	Net zero by 2050	Shortlisting large-scale renewables and storage for funding and supporting uptake of rooftop solar and batteries.
WA ©	8.2%	0.28	28.8%	-	Net zero by 2050	Introduced an aspirational target of net zero emissions by 2050.
NT ©	4.0%	0.12	18.1%	50% by 2030	(Draft target) Net zero by 2050	Introduced a draft aspirational target of net zero emissions by 2050.

#### **Boosting Energy Efficiency**

<sup>89</sup> Weisbrot et al (n 15) 42.

<sup>&</sup>lt;sup>90</sup> McCullough Robertson Lawyers, *Renewable energy in Australia: A guide to regulation* (Report, 16 June 2017) 17.

<sup>&</sup>lt;sup>91</sup> Ibid.

<sup>&</sup>lt;sup>92</sup> ACT Government Department of Environment, Planning and Sustainable Development, 'Cleaner Energy', *Renewable Energy Target Leislation and Reporting* (Web Page, 10 October 1029)< https://www.environment.act.gov.au/energy/cleaner-energy/renewable-energy-target-legislation-reporting>.

The new State Climate Change Policy must aim to boost energy efficiency and productivity in order to address climate mitigation and adaptation in WA.

An energy efficiency policy or scheme should be established in WA through legislation that includes mandatory energy saving targets for electricity retailers and incentive mechanisms such as discounts and rebates to households and businesses to purchase and install energy efficient products and reduce their energy consumption. The scheme could adopt a market-based approach and provide for 'certificates' to be sold by accredited certificate provider businesses that deliver energy saving activities or services (by installing or upgrading appliances, for example) to electricity and energy retailers. The electricity and energy retailers certificates would then surrender the certificates in order to meet the targets.

For example, the ACT's Energy Efficiency Improvement Scheme requires electricity retailers to achieve energy savings in households and small-to-medium businesses by placing a target on them to ensure a proportion of the savings are delivered to low income households.<sup>93</sup> This scheme has successfully achieved lifetime emission reductions of 500,000 tonnes CO2 and helping more than 74,000 households and businesses save approximately \$400 million over the lifetime of the energy saving items installed.<sup>94</sup> The scheme is established by the *Energy Efficiency (Cost of Living)* Improvement Act 2012 (ACT), which contains energy saving targets and provisions regulating energy savings obligations. The ACT Legislative Assembly is currently considering extending the scheme another 10 years to operate until the end of 2030.

#### **Battery Storage Opportunities**

We acknowledge and support the Future Battery Industry Strategy that aims to grow WA's future battery industry and the WA Government's commitment of \$6 million in funding to the Future Battery Industries Cooperative Research Centre. However, in our view, the WA Government needs to do more to encourage investment and leadership in innovative solutions such as lithium-ion batteries. For example, the State Climate Change Policy could incentivise the uptake of battery storage by providing rebates to households and small businesses for installing stationary energy battery systems to rooftop solar, like ACT's Next Generation Battery Storage Program.

#### (b) INDUSTRY INNOVATION

The Climate Issues Paper acknowledges that WA's emissions from electricity generation have almost doubled since 2005 due to the rapid growth in the resources sector, including LNG facilities and that emissions from industries contributes to approximately 50% of WA's emissions. It also recognises that WA's fugitive emissions have increased significantly, contributing 14% of the state's emissions. Despite this, the Climate Issues Paper expressly allows new resource proposals to further increase WA's emissions, presumably to ensure WA's economic prosperity. As addressed above, allowing this increase in emissions will hinder efforts to achieve this target and the objectives of the Paris Agreement.

<sup>93</sup> ACT Government Department of Environment, Planning and Sustainable Development, 'Smarter Use of Energy', Energy Efficiency Improvement Scheme (Web Page, 9 October 2019)< https://www.environment.act.gov.au/energy/smarter-use-of-energy/energy-efficiencyimprovement-scheme>. 94 Ibid.

According to recent analysis by Clean State, if new LNG projects proposed by Woodside's Burrup Hub expansion are approved and the Browse and Scarborough gas fields are opened up, emissions from WA's current and proposed LNG facilities will account for 47% of WA's annual emissions.<sup>95</sup> Further, over the next twelve years, the total cumulative emissions from WA's five current LNG facilities (384Mt) will cancel out the entire amount of abatement expected to be delivered under the ERF (375Mt). Annual carbon pollution from WA's current LNG projects cancels out the entire pollution savings from all of Australia's renewable energy every year and is almost five times greater than the savings made by every single solar panel across 2.1 million Australian rooftops every year.<sup>96</sup> Climate Analytics has also estimated that domestic emissions that could result from the development of all conventional LNG reserves are approximately 40-75% above what WA's energy sector could emit in accordance with Paris Agreement.<sup>97</sup>

In order to foster clean industries and technologies and decouple energy use in the resource sector, the State Climate Change Policy should focus on transitioning away from carbon-intensive industries and promoting the development of new clean industries in WA such as renewables such as green hydrogen. We acknowledge and support the *Renewable Hydrogen Strategy* and urge the WA Government to ensure that this is consistent with the State Climate Policy.

The WA Government can also support the transition towards clean, renewable energy by requiring the industry sector to decrease and offset its emissions through the use of renewable and innovative solutions and technologies. When the EPA publishes the updated Environmental Factor Guideline and Technical Guidance on Mitigating Greenhouse Gas Emissions and provides advice to the Minister for Environment in accordance with these documents, we urge the WA Government to follow the EPA's advice and impose conditions that require proponents to avoid and reduce emissions. For example, the WA Government should require resource proposals and the industry sector to use electric and industrial-scale renewable energy to reduce their emissions. The Climate Issues Paper acknowledges that many mining and energy projects are located in areas with abundant, high-quality renewable energy sources such as solar. It also recognises that integrating renewables into a project's energy mix can offset fuel costs, enhance energy security and help manage risks of fuel price volatility and future carbon pricing. Chevron and Woodside's Kitimat LNG Expansion Project in Canada proposes an all-electric design and the replacement of gas turbines with hydro-power, which it states "will achieve the lowest emissions intensity of any large-scale LNG facility in the world".<sup>98</sup>

To the extent emissions cannot be reduced, the WA Government should require proponents to offset their emissions to ensure WA's target of net zero emissions by 2050 is achieved, through methodologies such as carbon sequestration (carbon farming or soil carbon) or geosequestration.

The Climate Issues Paper refers to the contention that LNG displaces higher emission fuels such as coal. We emphasise that this contention has been criticised by the New South Wales Land and Environment Court in *Gloucester Resources Limited v Minister for Planning* [2019] NSWLEC 7 as

<sup>&</sup>lt;sup>95</sup> Clean State, Conservation Council Western Australia, *Runaway Train: The impact of WA's LNG industry on meeting our Paris targets and national effects to tackle climate change* (Report, 2019) 2

<sup>&</sup>lt;sup>96</sup> Ibid.

<sup>97</sup> Hare et al (n 1) 2.

<sup>&</sup>lt;sup>98</sup> Kitimat LNG, 'Kitimat LNG Expansion Project', *Project Description* (Project Description for Kitimat Expansion, 8 July 2019) 72

<sup>&</sup>lt;a href="https://www.projects.eao.gov.bc.ca/api/document/5d278561caf02f00216ee6ab/fetch/KLNG\_ProjectDescription\_CEAA\_FINAL.pdf">https://www.projects.eao.gov.bc.ca/api/document/5d278561caf02f00216ee6ab/fetch/KLNG\_ProjectDescription\_CEAA\_FINAL.pdf</a>

being flawed,<sup>99</sup> and must be credibly substantiated and proven before it can be used to support further fossil fuel developments. Given the global transition away from fossil fuels towards renewables, such a claim is likely to be difficult to substantiate. Adequate verification of market substitution claims of this kind would also require a reliable tracking system, standard or framework to be established at the state or national level to quantify avoided emissions and ensure that reductions are credible and genuine.

## (c) FUTURE MOBILITY

The Climate Issues Paper acknowledges that transport emissions contribute 17% of WA's greenhouse gas emissions and increased by 53% between 2005 and 2017. Electric vehicles have lower operating costs and can reduce WA's transport emissions. The Climate Issues Paper recognises that WA is lagging behind the rest of the world in its uptake of electric vehicles and states that the WA Government is "investigating options to accelerate uptake of electric vehicles and deliver a strategy that will support a transition to cleaner electrified transportation".<sup>100</sup> We welcome this statement and emphasise that WA's new State Climate Change Policy should encourage the WA Government to increase funding in, and develop and implement specific strategies and programs to support and remove barriers to, the uptake of low emission solutions such as electric and hybrid vehicles and electrification of transport to ensure WA's transport emissions are effectively reduced.

(d) REGIONAL PROSPERITY

The Climate Issues Paper recognises that the agriculture sector is the fourth most energy-intensive industry in Australia. However, agriculture also presents significant opportunities to reduce emissions through measures such as carbon farming, soil carbon and biofuels/energy. The IPCC Special Report recognises the importance of carbon sequestration for agriculture, stating that "at the local scale, soil carbon sequestration has co-benefits with agriculture and is cost-effective even without climate policy (high confidence)".<sup>101</sup>

The State Climate Change Policy should support innovative agricultural solutions to climate mitigation and adaptation such as the potential use of biofuels or bioenergy as an alternative energy source to fossil fuels through the development of specific action plans. For example, the Queensland Government plans to invest in the transition to low-carbon biofuels by developing an action plan to support liquid fuel users to sustainable, low carbon biofuels particularly in sectors such as agriculture, mining and freight where electrification may be more onerous.

## **Carbon Offset and Sequestration Opportunities**

The Climate Issues Paper acknowledges that carbon offsets could unlock new income streams in regional and remote areas, support regional prosperity and deliver environmental co-benefits. It also refers to the potential of carbon faming to generate significant long-term environmental, economic and cultural benefits for regional and remote Aboriginal communities, but highlights that complex legal and policy issues and competing interests (native title, mining) need to be addressed.

<sup>&</sup>lt;sup>99</sup> Gloucester Resources Limited v Minister for Planning [2019] NSWLEC 7 [538].

<sup>&</sup>lt;sup>100</sup> Issues Paper (n 8) 9.

<sup>&</sup>lt;sup>101</sup> Special Report (n 25).

As addressed above, the State Climate Change Policy should support and encourage carbon offset and sequestration opportunities such as carbon farming, soil carbon, blue carbon and geosequestration to reduce WA's emissions. We acknowledge the strategy for carbon farming that is being developed by the WA Government and encourage it to ensure that environment and social cobenefits should be considered in offset selection and, where available and possible, offsets should be required to be sourced from within WA as it results in jobs for WA regional and Aboriginal communities. Offsets should be required to comply with the Australian Government Australian Carbon Credit Units (ACCUs) system and with international standards and must be relinquished or surrendered to the WA Government or Commonwealth prior to, or at the time when the emissions are produced.

The WA Government can also support a carbon offsets market and increase demand and revenue by addressing regulatory issues and barriers, introducing legislative requirements relating to eligibility and accounting of carbon offsets, and imposing offset requirements on significant proposals in WA.

(e) WASTE REDUCTION

The Climate Issues Paper acknowledges that emissions from the waste sector have increased 20% between 2005 and 2016. It also recognises that WA produces 20% more waste annually than the national average – resulting in significant emissions of methane.

We acknowledge the *Waste Avoidance and Resource Recovery Strategy 2030* that was launched by the WA Government in February 2019 and aims to improve WA's waste management and create a sustainable, low-waste circular economy in which human health and the environment are protected from the impacts of waste.<sup>102</sup> The Strategy is accompanied by the *Waste Avoidance and Resource Recovery Strategy Action Plan 2030*. We also acknowledge the WA Government's ban on lightweight, single-use plastic bags, the introduction of a container deposit scheme in WA, the government targets for at least 75% of waste to be reused or recycled by 2030 in the WA Government's 'Our Priorities: Sharing Prosperity' and the construction of the first Australian waste-to-energy plant in WA that will have the potential of saving up to 400,000 tonnes of CO2e emissions per year. We support these initiatives to reduce waste and encourage the State Climate Change Policy to encourage and facilitate further emissions reductions from the waste sector in WA.

## (f) SAFE AND HEALTHY COMMUNITIES

The Climate Issues Paper recognises the potential adverse consequences of climate change impacts including heatwaves, extreme weather events, increases in pollutants and allergens, and changing disease patterns, on the health and safety of WA communities, particularly vulnerable communities.

The new State Climate Change Policy should focus on effectively managing and reducing the increased impacts of climate change on human health and wellbeing through the development and implementation of a specific health strategy and action plan specific to climate change. We acknowledge the Climate Health WA Inquiry announced in March 2019 and urge the WA Government to ensure the findings of the Inquiry inform development of this health strategy to

<sup>&</sup>lt;sup>102</sup> Issues Paper (n 8) 15.

ensure it is capable of reducing and responding to the impacts of climate change on health. This strategy should support the Department of Health in taking a proactive approach to climate change through developing comprehensive health-specific climate adaptation plans, policies, and initiatives and facilitate the review of the WA health system and legislation to ensure it is capable of reducing and responding to potential health impacts of climate change.

The Climate Issues Paper also recognises that climate change will increase demands on fire services by lengthening the fire season and exacerbating the risk of severe fire by narrowing the seasonal window for hazard reduction measures. The State Climate Change Policy should propose the development and implementation of a specific strategy and action plans to support emergency and disaster management and planning.

## (g) WATER SECURITY

The Climate Issues Paper recognises the impacts of climate change (in particular, drying trends and reduced rainfall) on groundwater supplies and water security in WA. It also acknowledges that WA's economic, social and environmental future depends on securing our water resources in the face of climate change and highlights the importance of the WA community using water more efficiently, enhanced community engagement and improved water literacy.

We acknowledge that WA has been proactive in comparison with other States and Territories in considering climate change in water resource planning. The State Climate Change Policy should acknowledge the significance of the impact of climate change on WA' water supply and commit the Government to continued improvement in this area The policy should also support the proposed repeal and replacement of existing water legislation, the *RIWI Act*, to ensure sustainable and efficient allocation of water resources in WA, or in the alternative support amendments to the RIWI Act to ensure that climate change impacts are taken into account in all water allocation decisions. For example, the Queensland *Water Act 2000* require the Minister, while making a draft water plan or draft water use plan, to consider the water-related effects of climate change on water availability, water use practices and the risk to land or water resources arising from the use of water on land.<sup>103</sup>

The State Climate Change Policy should also encourage the continued close collaboration between the WA Government, Water Corporation, communities and local governments in relation to water security and supply through reforms and supporting initiatives to encourage recycling and water sensitive urban design.

## (h) LIVEABLE TOWNS AND CITIES

The Climate Issues Paper acknowledges that buildings account for 1/5<sup>th</sup> of Australia's emissions and that by international standards Australia's housing stock is relatively inefficient. Despite their costs savings, the Issues Paper highlights that barriers to the adoption of energy efficiency improvements in WA include information gaps, lack of skills to implement, high initial costs, and split incentives.<sup>104</sup> The Climate Issues Paper refers to COAG Trajectory for Low Energy Buildings which contains a national trajectory towards zero energy (and carbon) ready buildings for Australia.

<sup>&</sup>lt;sup>103</sup> Water Act 2000 ss 45(2)(g) and 60(2)(c).

<sup>&</sup>lt;sup>104</sup> Issues Paper (n 8) 22.

To address the barriers to energy efficiency for built environment and ensure WA towns and cities are liveable in a changing climate the new State Climate Change Policy should support the development and implementation of a specific liveable city or urban forests strategy. A strategy will support intelligent urban planning, higher design and construction standards and energy-efficiency equipment to reduce emissions and utility costs and enhance health and comfort, and could address and support innovative ways of retaining vegetation through urban forests and tree canopy. Further, a strategy could build on the planning guide for urban forest released by the Department of Planning, Lands and Heritage (DPLH) in partnership with the Western Australian Local Government Association (WALGA). For example, *Canberra's Living Infrastructure Plan* contains living infrastructure targets of achieving 30% tree canopy cover (or equivalent) and 30% permeable surfaces by 2045 that are supported by actions including legislative review, strategies and programs.<sup>105</sup>

*Melbourne Urban Forest Strategy* also extends and links existing urban greening, reforestation and nature initiatives across Melbourne to improve wellbeing and reduce our exposure to hazards such as heatwaves and flooding.

(i) RESILIENT INFRASTRUCTURE AND BUSINESS

The Climate Issues Paper acknowledges that climate change presents key risks to primary industry and resources sector productivity, business, operations and infrastructure and that resilient infrastructure is critical for WA's productivity and economic prosperity. The State Climate Change Policy should support the resilience of infrastructure and businesses by ensuring that consideration of climate is embedded in government decision-making relating to infrastructure, introducing planning policies that support effective adaptation, establishing appropriate regulatory and fiscal structures, and providing high-quality information and tools to support proper planning.

#### **Coastal Protection**

The Climate Issues Paper refers to the *State Planning Policy 2.6 – Coastal Planning* which provides a planning framework for the long-term sustainability of WA's coast. This Policy and requirements for coastal foreshore planning in WA were addressed in *Two Rocks Investments Pty Ltd v Western Australian Planning Commission* [2019] WASAT 59 in which the State Administrative Tribunal refused to approve the proposed local structure plan on the basis that it did not contain appropriate zones to protect the area from future sea level rises and coastal processes as a consequence of climate change.

To strengthen the protection of WA's coastal areas, specific legislation and statutory provisions relating to coastal hazard management should be introduced in WA that align with provisions in the State Planning Policy. For example, the *Coastal Management Act 2016* (NSW) was introduced in NSW which establishes a framework and objectives for the strategic and integrated management of coastal issues.

#### **Resilient Businesses**

<sup>&</sup>lt;sup>105</sup> ACT Government Department of Environment, Planning and Sustainable Development, *Canberra's Living Infrastructure Information Paper* (Report, February 2018) see generally.

The Climate Issues Paper acknowledges that climate change impacts may increase infrastructure and insurance costs and present risks to private assets, operations and infrastructure of businesses through direct impacts and volatile fuel costs and emissions policy. The State Climate Change Policy should address these physical and economic risks and ensure that market, regulatory and governance barriers to businesses and local governments adapting effectively are removed through reforms.

There has been a recent trend of climate litigation targeting companies and their officers in relation to their consideration and disclosure of climate change risks in reports and decision-making. Noel Hutley SC and Sebastian Hartford Davis' original and supplementary Memorandum of Opinion on "Climate Change and Directors' Duties" (Hutley Opinion) confirms that the duty of directors relating to care and diligence under section 180(1) of the Corporations Act 2001 (Cth) (Corporations Act) and general law includes consideration of foreseeable risks associated with climate change.<sup>106</sup> To comply with the duty and avoid liability, directors must consider foreseeable physical, transition and litigation climate risks and obtain knowledge and inform themselves of climate change risks and potential impacts on the company,<sup>107</sup> the degree to which climate change risks should be disclosed (in directors or financial reports), and whether appropriate steps should be taken to respond to these risks.

(j) PROTECTING BIODIVERSITY

Climate change threatens to exacerbate existing pressures on WA's biodiversity and ecosystems. The Climate Issues Paper recognises that WA's biodiversity is under threat from a range of processes, including climate change, which has already impacted biodiversity and is predicted to cause widespread changes to the health of marine and terrestrial ecosystems. While we acknowledge and support WA Government's 'Plan for Our Parks', which contains a target of expanding the conservation estate by 5 million hectares, or 20%, by 2023-24, in our view, more needs to be done to protect and enhance the resilience of WA's biodiversity in the face of climate change.

The State Climate Change Policy needs to ensure that WA's biodiversity including natural resources, ecosystems, communities and forests are protected from human activities such as clearing and logging and climate change impacts, in order to preserve carbon sinks, reduce emissions and to protect species from extinction. The State Climate Change Policy also needs to ensure that biodiversity is resilient to the impacts of climate change such as bushfires, flooding and droughts. Climate Analytics reports that native vegetation clearing and deforestation in the land use, land-use change and forestry (LULUCF) essentially need to stop by 2025 for WA to achieve net zero emissions by 2030.<sup>108</sup> As the IPCC Special Report states, "Reducing deforestation and forest degradation rates represents one of the most effective and robust options for climate change mitigation, with large mitigation benefits globally". Further, emissions from land use change and forestry account for about 1/3 of accumulated atmospheric CO2 and are currently around 13% of total annual emissions (Global Carbon Project 2018).

<sup>&</sup>lt;sup>106</sup> As the level of care and diligence that a director is required to meet depends on the 'nature and extent of the foreseeable risk of harm to the company that would otherwise arise' (*Vrisakis v ASC* (1993) 9 WR 395). <sup>107</sup> In order to 'sufficiently place themselves in a position to guide and monitor the management of the company'.

<sup>&</sup>lt;sup>108</sup> A 1.5'C Compatible Carbon Budget (n 5) 4.

To adequately protect and enhance the resilience of WA's biodiversity, the WA Government needs to develop a specific WA biodiversity strategy and action plans that take into account climate change and are consistent with the State Climate Policy. This strategy could be similar to Victoria's *Protecting Victoria's Environment - Biodiversity 2036* and should contain targets, support improved land and biodiversity management practices such as sustainable farming to reduce vulnerability and increase the resilience of biodiversity, promote landscape ecological connectivity between habitats and resilience (connectivity conservation), identify and prioritise systems for conservation, restore remnant ecological communities and urban forest and provide for landscape-scale conservation. It could also proactively promote collaboration with landholders, community groups and rural and remote communities in relation to biodiversity protection and conservation such as blue carbon, and facilitate necessary legislative reforms to increase the protection and resilience of WA's biodiversity.

## (k) STRENGTHENING ADAPTIVE CAPACITY

WA needs to strengthen its capacity to respond and adapt to the impacts of climate change including bushfires, floods, droughts and heatwaves. The Climate Issues Paper states that the WA Government can support adaptive capacity by providing tools, guidance and accurate information about impacts of climate change and adaptation options for stakeholders and that building strong State and local government partnerships and supporting local governments adaptive capacity is the key to WA's future resilience.

As stated above, the WA Government should develop a state wide, whole-of-government adaptation strategy and accompanying adaptation action plans to strengthen WA's adaptive capacity and guide future adaptation action by the WA community, sectors and systems. Legislation can also be introduced that requires strategies and adaptation action plans to be prepared for key sectors and systems like Victoria's *Climate Change Act 2017* (Vic). The adaptation strategy and action plans can provide up-to-date, accessible, accurate and relevant scientific information about the local, regional or sectoral impacts of climate change to businesses, households and the community, and tools and guidance about how to respond to these impacts. This will close the gaps in knowledge and skills and help to build effective adaptive capacity.

The WA Government should also promote a coordinated, collaborative and regional approach to adaptation by reforming existing WA legislation *such as the EP Act, Planning and Development Act, Mining Act, BC Act, PAGER Act to* ensure climate adaptation is integrated into state-wide planning across all sectors. It should also support partnerships and collaboration between government bodies, businesses and the community in relation to local and regional adaptation programs by recognising voluntary agreements and offset programs. These voluntary agreements and programs could underpin regional climate change adaptation planning by bringing together key partners in a formal collaborative agreement.

#### LAW REFORM REQUIRED

#### INTRODUCTION OF ZERO CARBON/CLIMATE CHANGE LEGISLATION

Comprehensive climate change or "zero carbon" legislation should also be introduced in WA to support the State Climate Policy. We note that the Department of Water and Environmental Regulation is currently reviewing the *Environmental Protection Act 1986* (WA), with a discussion paper and exposure draft bill being released in October 2019. However, the proposed reforms in the discussion paper and exposure draft bill do not refer to climate change or greenhouse gas emissions. While we will be advocating for climate change and greenhouse gas emissions to be expressly included in the 'modernisation' of WA's environmental protection legislation, climate change-specific legislation should be introduced in WA to provide for climate mitigation and adaptation.

Climate change legislation already exists in various countries New Zealand, Scotland and the United Kingdom. Victoria, South Australia, Tasmania and the Australian Capital Territory also have climate change legislation. This legislation generally includes emissions reduction targets, net zero emissions targets and RETs, climate change measures and measures to promote the use of renewable energy, guiding principles to embed climate change in government decision-making, and measures to facilitate the development of policies and programs.

At a general level, WA zero carbon/climate change legislation should:

#### Include legally binding mitigation targets

WA zero carbon/climate change legislation should bind state and local governments to short and long-term emissions reduction targets. In particular, it should include:

- Principal and long-term target of achieving net zero emissions target by 2050
- Interim, 5 yearly emissions reduction targets
- Pro-rata sectoral targets for sectors of WA's economy- including industry, energy, transport, etc.
  -these targets must be supported by action plans that provide pathways.

WA's RET could also be included in climate change legislation (like in SA and ACT) and supported by other legislation that implements incentive mechanisms – in particular, a FiT and reverse auctions scheme.

#### Establish an independent expert body to provide advice, set targets and evaluate progress

WA zero carbon/climate change legislation should establish an independent expert body such as a Climate Change Commission or Council. The purpose of this body should be to provide independent, expert advice to the Minister for Environment on climate change issues –including climate mitigation and adaptation, and to evaluate, monitor and review the government's progress in achieving its emissions targets.

This body should also be responsible for setting the emissions reductions targets and trajectories according to a science-based carbon budgets approach and analysis. According to recent analysis conducted by Climate Analytics, a WA carbon budget would carbon budget for WA's fossil fuel CO2 emissions for the period 2018-2050 is estimated at around 950 MtCO2<sup>109</sup> and an emissions reduction

<sup>&</sup>lt;sup>109</sup> A 1.5'C Compatible Carbon Budget (n 5) 3.

target of 49% below 2005 levels by 2030 is required.<sup>110</sup> Carbon budgets for WA could be set every 5 years, and inform the interim/short-term emission reduction targets.

The ACT Government uses a 'carbon budget' approach to set its targets, to ensure they are consistent with action required to keep warming below 2°C and climate science.<sup>111</sup> The United Kingdom's *Climate Change Act 2008* also requires the State to set a carbon budget and to ensure emissions do not exceed this carbon budget.<sup>112</sup>

## Require planning for climate change

WA zero carbon/climate change legislation should require WA state and local governments to commit to planning for climate change and achieving the emissions reduction targets by developing a climate change strategy and adaptation action plans every 5 years. The legislation should outline what these strategies and action plans must include.

#### Contain reporting, monitoring and verification mechanisms

WA zero carbon/climate change legislation should contain reporting, monitoring and verification mechanisms to monitor WA's progress towards achieving the targets and hold governments accountable for their actions. It could require the Minister for Environment to report on the government's progress in achieving the target and reducing emissions each year to the independent expert body.

## Embed climate change considerations into government decision-making

WA zero carbon/climate change legislation embed climate change into government decision-making by requiring state and local governments to consider climate change mitigation and adaptation (if relevant) when making decisions, policies, programs or processes. The legislation should contain policy objectives, guiding principles and/or considerations that must be considered in decision-making. For example, the Victorian Climate Change Act contains the following principles –

- Principle of informed decision making
  - Requires decisions, policies, programs or processes to be based on a comprehensive analysis of the best practicably available information about the potential impacts of climate change and take into account the potential contribution to the State's greenhouse gas emissions
- Principle of integrated decision-making
  - Requires decisions, policies, programs or processes to integrate the competing longterm, medium-term and short-term environmental, economic, health and other social considerations relating to climate change.
- Principle of risk management
  - Requires decisions, policies, programs or processes to:
    - be based on careful evaluation of the best practicably available information about the potential impacts of climate change, assessment of consequences

<sup>&</sup>lt;sup>110</sup> Ibid 4.

<sup>&</sup>lt;sup>111</sup> ACT Government Department of Environment, Planning and Sustainable Development, ACT Climate Change Strategy 2019-25 (Report, 2019) 23.

<sup>&</sup>lt;sup>112</sup> Climate Change Act 2008 s 4.

of each of the options having regard to their risks and managing and allocating the risks associated with the potential impacts of climate change...

- not rely on a lack of full scientific certainty as a reason to postpone appropriate measures to prevent serious or irreversible loss or damage as a result of climate change
- Principle of equity
  - Requires decisions, policies, programs or processes to have regard to opportunities should be created by the present generation to increase the capacities within that generation and future generations to adapt to climate change and present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations.
- Principle of community engagement
  - Requires community involvement in decisions, policies, programs or processes relating to climate change that may affect members of the community or members of the community in future generations, especially members of vulnerable or marginalised communities, should be facilitated.
- Principle of compatibility
  - Requires decisions, policies, programs or processes to address issues relating to climate change should seek to promote a coherent policy framework within the State; and seek to achieve cohesion the policies, programs, initiatives, standards or commitments relating to climate change of other States or Territories, the Commonwealth government, international governments, bodies and organisations.

The legislation could also impose duties on decision-makers in relation to climate change. For example, *Climate Change (Scotland) Act 2009* requires public bodies to act in a way that is best calculated to contribute to the delivery of emissions reduction targets or programs and in a way it considers is most sustainable in exercising its functions.<sup>113</sup>

#### Require emissions reduction pledges

WA zero carbon/climate change legislation should also require the following emissions reduction pledges to be developed by relevant government bodies and sectors to hold them accountable:

- Whole-of-government pledge
- Sector pledges
- Council pledges

## Contain offset requirements

WA zero carbon/climate change legislation should support and manage carbon offsets and sequestration measures in WA. It should provide requirements relating to eligibility and accounting of carbon offsets. It can also encourage offsets by recognising voluntary programs and agreements in relation to carbon offsets.

<sup>&</sup>lt;sup>113</sup> Climate Change (Scotland) Act 2009 s 44.

For example, the Victorian *Climate Change Act 2017* provides for forestry and carbon management agreements to be entered between registered proprietors of a freehold or leasehold estate and with the owner of a forest carbon right relating to the land and with any other person for the purpose of providing for the imposition of management obligations in relation to carbon sequestration by vegetation or underground, or the management of vegetation.

## Encourage collaborative climate action and partnerships

WA zero carbon/climate change legislation should contain objectives of encouraging the engagement of businesses and communities and local and regional action in relation to climate mitigation and adaptation and provisions that provide for and recognise voluntary agreements and programs.

For example, South Australia's *Climate Change and Greenhouse Emissions Reduction Act 2007* provides for and recognises sector agreements between the government and members of the community, industry or business groups that may provide for the following matters:

- objectives for a particular enterprise or industry, or a particular sector of the State's economy, with respect to reducing or limiting greenhouse gas emissions or mitigating the effects of greenhouse gas emissions;
- strategies to achieve any objectives, including strategies to achieve a reduction in energy use, to maximise efficiencies in the use of energy or to promote the use of renewable energy;
- strategies to promote or support research and development, and innovation in technologies or practices, to reduce greenhouse gas emissions or to adapt to climate change;
- methods to measure or acknowledge successes in meeting any targets.

## INTRODUCTION OF RENEWABLE ENERGY LEGISLATION

Renewable energy legislation could also be introduced in WA that legislates a state-based RET and establishes incentive schemes such as a FiT and reverse auction mechanism to stimulate investment in renewable energy in WA.

For example, under the *Electricity Feed-in (Large-scale Renewable Energy Generation) Act 2011* (ACT) outlines requirements relating to FiT capacity, release of such capacity (through competitive process/auction or direct grant), FiT entitlements and support payments.

#### LEGAL RISKS ASSOCIATED WITH INADEQUATE STATE CLIMATE CHANGE POLICY

#### CLIMATE LITIGATION

There has been an international trend of climate litigation that targets governments for their adequate climate action and policy.<sup>114</sup> A well-known example of this is *Urgenda Foundation v The State of the Netherlands* (*Urgenda*), in which Dutch government was successfully sued for its negligence in failing to take adequate climate action. This lawsuit was brought by Urgenda Foundation and 866 individual citizens who argued that the Dutch government acted unlawfully in

<sup>&</sup>lt;sup>114</sup> Urgenda Foundation v The State of Netherlands, Leghari v Federation of Pakistan, Juliana et al v United States of America, Thomson v Minister for Climate Change Issues, Notre Affairs Tous and Others v France.

failing to take sufficient steps to reduce its emissions in line with levels recognised as necessary to prevent climate change. The Court found that, given the urgency and seriousness of climate change and the extensive scientific knowledge surrounding the issue, the Dutch government has a "serious duty of care to take measures to prevent it"<sup>115</sup> and ordered the government to reduce emissions at a greater rate in order to fulfil this duty of care to protect Dutch citizens against the imminent danger caused by climate change.

While replicating arguments employed in *Urgenda* is difficult in Australia as much of the Dutch law referred to in that case differs quite significantly from Australian tort law, if WA's State Climate Change Policy does not ensure that WA's emissions are reduced and WA's adaptive capacity is strengthened, there will be an increased risk of climate litigation against the WA Government.

<sup>&</sup>lt;sup>115</sup> Urgenda Foundation v The State of Netherlands [4.65].