

# Submission to the Climate Change Authority on setting, tracking and achieving Australia's emissions reduction targets

**30 June 2023** 

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EDO is a community legal centre specialising in public interest environmental law. We help people who want to protect the environment through law. Our reputation is built on:

**Successful environmental outcomes using the law.** With over 30 years' experience in environmental law, EDO has a proven track record in achieving positive environmental outcomes for the community.

**Broad environmental expertise.** EDO is the acknowledged expert when it comes to the law and how it applies to the environment. We help the community to solve environmental issues by providing legal and scientific advice, community legal education and proposals for better laws.

*Independent and accessible services.* As a non-government and not-for-profit legal centre, our services are provided without fear or favour. Anyone can contact us to get free initial legal advice about an environmental problem, with many of our services targeted at rural and regional communities.

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#### **Submitted to:**

Climate Change Authority

Submitted via: Climate Change Authority Consultation Hub

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### **Acknowledgement of Country**

The EDO recognises First Nations Peoples as the Custodians of the land, seas, and rivers of Australia. We pay our respects to Aboriginal and Torres Strait Islander Elders past, present, and emerging, and aspire to learn from traditional knowledge and customs so that, together, we can protect our environment and cultural heritage through both Western and First Laws. In providing submissions, we pay our respects to First Nations across Australia and recognise that their Countries were never ceded and express our remorse for the deep suffering that has been endured by the First Nations of this country since colonisation.

## **Executive Summary**

Environmental Defenders Office (**EDO**) welcomes the opportunity to provide feedback on the Climate Change Authority's Issues Paper: Setting, tracking and achieving Australia's emissions reduction targets.

EDO's work, and this submission, are informed by climate science, human rights, and an environmental justice framework. For too long, these principles have been missing from climate policy debates in Australia. We are now in the critical decade for ensuring a safe climate, and Australia has catching up to do in terms of our emissions targets, accounting, and domestic action. Urgency, ambition, and equity are crucial.

EDO supports the Climate Change Authority's plan for climate policy evolution, with the intention to 'review, ratchet, and repeat.' While acknowledging there has been progress made by this federal government in addressing climate change, EDO notes there are still concerning gaps in Australia's response. This submission is intended to inform the Authority's advice relating to some of these gaps, and EDO urges the Authority to take an evidence driven and integrated approach.

EDO makes **9 high level recommendations** for the Climate Change Authority's consideration, with further detail provided in the submission.

- 1. Climate science must drive strategic, progress, and target-setting frameworks.
- 2. Human rights should be embedded in Australia's response to climate change.
- 3. First Nations rights must be prioritised in addressing and responding to climate change.
- 4. Australia's emissions target must be ambitious and reflect the urgency of emissions reduction task.
- 5. A rapid phase out of fossil fuel production is essential.
- 6. Climate change considerations must be integrated across all sectors.
- 7. Australia must assess its contribution to global climate change through fossil fuel exports.
- 8. Accurate emissions accounting is essential.
- 9. Carbon credit integrity issues must be resolved.

<sup>&</sup>lt;sup>1</sup> Climate Change Authority, Setting, tracking and achieving Australia's emissions reduction targets (Issues Paper, May 2023) (**Issues Paper**).

#### Introduction

Environmental Defenders Office (**EDO**) welcomes the opportunity to provide feedback on the Climate Change Authority's Issues Paper: Setting, tracking and achieving Australia's emissions reduction targets (**Issues Paper**). This decade is critical for achieving rapid emissions reductions, transitioning to a renewable economy, and ensuring Australia is doing its fair share in addressing the climate crisis. The Climate Change Authority has a crucial role to play in advising the Federal Government how such a transition can occur, and at what pace.

The climate science could not be clearer. The Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report (IPCC AR6 Report)<sup>2</sup> confirms it is unequivocal that human influence has heated the atmosphere, ocean and land; and that this unprecedented human-induced climate change is already affecting many weather and climate extremes in every region across the globe. Urgency and ambition in domestic policy, as well as international engagement, are essential.

This is the critical decade. We need a strong legal framework in Australia to define when and how we will get to real net zero greenhouse gas emissions. A mid-century policy aspiration based on assumptions and false narratives is simply not sufficient. The climate risks must be addressed, and renewable opportunities must be embraced, in order to avoid extreme financial costs and environmental impacts, take advantage of Australia's ability to be a renewable energy leader, and ensure a just energy transition.

**EDO Roadmap for Climate Reform** 

This submission is drafted in the context of EDO's **Roadmap for Climate Reform**, released in 2022, which sets out key reforms to be undertaken in this term of government. EDO is pleased that several recommendations have been implemented by the Federal Government since publication of the Roadmap, but notes that there remain significant gaps in Australia's response to climate change. The Authority plays a critical role in filling those gaps, and we provide recommendations in this submission to assist the Authority's work in doing so.

EDO understands feedback provided in this consultation process will inform the Climate Change Authority's work across multiple interrelated projects. This includes reviewing and updating Australia's Nationally Determined Contribution (**NDC**) under the Paris Agreement; advising the Minister for Climate Change and Energy on the Annual Climate Change Statement under the *Climate Change Act 2022*; and reviewing both the *Carbon Credits (Carbon Farming Initiative) Act 2011* and the *National Greenhouse and Energy Reporting Act 2007*.

As such, the Issues Paper covers a significant breadth of climate change related issues. EDO has responded to a selection of key questions relevant to our law reform priorities, however would be pleased to provide further detail in consultation on these topics or the Authority's broader mandate, as required.

<sup>&</sup>lt;sup>2</sup> Hoesung Lee et al., 'Synthesis Report of the IPCC Sixth Assessment Report (AR6)' (2023) IPCC, Figure 3.5, 56, https://report.ipcc.ch/ar6syr/pdf/IPCC\_AR6\_SYR\_LongerReport.pdf (**IPCC Sixth Assessment Report**).

This feedback also incorporates several submissions made by EDO to government and departmental consultations; these should be taken as forming part of EDO's input.

Our key concerns are identified in this submission and relate to:

#### 1. The Climate Change Authority's conceptual frameworks

- 1.1 Climate science must drive strategic, progress, and target-setting frameworks
- 1.2 Human rights should be embedded in Australia's response to climate change
- 1.3 First Nations rights must be prioritised in addressing and responding to climate change
- 2. Reviewing and updating emissions reduction targets
- 3. Cross-cutting climate issues
  - 3.1 A rapid phase out of fossil fuel production is essential
  - 3.2 Climate change considerations must be integrated across all sectors
  - 3.3 Australia must assess its contribution to global climate change through fossil fuel exports
  - 3.4 Accurate emissions accounting is essential
  - 3.5 Carbon credit integrity issues must be resolved

### 1. The Climate Change Authority's conceptual frameworks

The Authority's conceptual frameworks are used to organise and inform the work of the Authority, including overall strategic direction as the Authority fulfills its relevant statutory obligations.<sup>3</sup> The strategy, progress, and target-setting frameworks are therefore essential for ensuring government receives the best and most up to date advice.

As noted by the Authority, achieving real net zero emissions requires a whole of economy approach, and must involve societal and corporate action. However, governments have a critical role in agenda and culture setting, enabling positive action, and preventing environmental and climate harm. Governments (national, state, territory and local) must lead the way in enabling climate action through policy and investment, as addressing the climate crisis cannot rely on private actions or through market operation alone. It is important this concept is embedded deeply into the strategic framework to ensure government-led, climate informed policy making shapes the operation of each 'enabler' identified by the Authority.

The science is clear that Australia must pursue all efforts to meet the goal of the Paris Agreement of limiting global temperature to increase to well below 2 degrees Celsius (°C) above pre-industrial levels, while pursuing efforts to limit the increase to 1.5°C. Urgency and ambition must therefore be at the forefront of the Authority's advice to government. Crucially however, the transition must prioritise equity, human rights, and the voices of First Nations Communities.

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<sup>&</sup>lt;sup>3</sup> Issues Paper, 10.

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

The recommendations in this Part address the Authority's frameworks for assessing strategy, progress and target-setting in line with these considerations. Further detail on target-setting, including specific recommendations for updated emissions targets, are contained in Part 2.

#### 1.1 Climate science must drive strategic, progress, and target-setting frameworks

Australia is already experiencing the impacts of climate change, which include the warming and acidification of oceans, sea level rise, increased and more intense rainfall in the north of the country, and long-term increases in extreme fire weather. Extreme heat days, longer dry spells, and harsher fire weather will become increasingly common, although the severity of impacts experienced will be less if emissions can be reduced. The impacts of climate change are not just environmental: there are, and will be further, significant implications across all sectors, including health, the economy and national security.

IPCC AR6 Report confirms that every tonne of carbon dioxide (CO<sub>2</sub>) emissions adds to global warming, and concludes that limiting human-induced global warming to a specific level requires limiting cumulative CO<sub>2</sub> emissions and reaching at least net zero emissions, including driving strong reductions in other greenhouse gas (**GHG**) emissions. The IPCC has also confirmed that to avoid the worst impacts and costs, we need to limit warming of average surface temperatures to no more than 1.5°C above pre-industrial levels.

The window of time to achieve this goal is closing, which means we need to act now. EDO **recommends** a scientific assessment of what Australia must do to help pursue efforts to limit global temperature increase to 1.5°C should be a prominent and overarching element in the Authority's strategic or targeting setting frameworks, not just one of many factors or considerations to be balanced. The Authority's strategy (and target-setting) must begin with this science – i.e. what is necessary to keep heating below 1.5C. From this, strategic direction and progress assessment can be derived, with consideration of other inputs. This is contrary to the current policy-making approach, which appears to consider policies as announced, before assessing their contribution to climate action. EDO **recommends** the Authority consider emissions reductions required by the science, first, then work backwards to develop the best actions and enablers for achieving the outcome.

#### 1.2 Human rights should be embedded in Australia's response to climate change

We refer the Authority to our report: A Healthy Environment is a Human Right: Report on the Status of the Human Right to a Healthy Environment in Australia (2022)

<sup>&</sup>lt;sup>5</sup> The Bureau of Meteorology and CSIRO, State of the Climate 2020 (2020).

<sup>&</sup>lt;sup>6</sup> Intergovernmental Panel on Climate Change, Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty (2018).

<sup>&</sup>lt;sup>7</sup> See e.g. Reputex Energy, The economic impact of the ALP's Powering Australia Plan (Report 3 December 2021) <a href="https://www.reputex.com/research-insights/report-the-economic-impact-of-the-alps-powering-australia-plan/">https://www.reputex.com/research-insights/report-the-economic-impact-of-the-alps-powering-australia-plan/</a>.

# 1.3 First Nations rights must be prioritised in addressing and responding to climate change

Overburdened communities, including First Nations communities and Pacific States, are disproportionately feeling the effect of climate impacts. Limiting global temperature increase to 1.5°C is critically important for the survival and sovereignty of Indigenous and First Nations Peoples, including in the Torres Strait Islands and Pacific States, who are already suffering significant climate harm at 1.1°C warming. The disproportionate impact of climate change on First Nations Peoples must be priority consideration for the Authority across all frameworks driving its work.

The rights of First Nations Peoples have been internationally recognised, with the United Nations Declaration on the Rights of Indigenous Peoples (**UNDRIP**) being adopted by the United Nations General Assembly on 13 September 2007 and endorsed by Australia on 3 April 2009. The principles of free, prior, and informed consent (**FPIC**) underpin the international obligation to consult First Nations Peoples, enshrined in articles 19 and 32 of UNDRIP. In advising on both adaptation and mitigation, including the energy transition to renewables, the Authority must ensure First Nations Communities are appropriately consulted, and give free, prior and informed consent for any matters which affect First Nations interests, community or heritage.

**EDO's submission** to the Commonwealth parliamentary inquiry into the destruction of 46,000 year old caves at the Juukan Gorge in the Pilbara region of Western Australia by resources company Rio Tinto addresses the importance of FPIC in the context of fossil fuel production. Similarly, EDO's work on consultation standards for the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) illustrate best practice which the Authority should be cognisant of in advising on relevant matters, including in relation to renewables projects.<sup>8</sup>

#### 2. Reviewing and updating emissions reduction targets

As outlined above, the Authority's target setting framework must proceed first and foremost based on what the science requires for a safe climate; and in line with our international obligations relating to human rights and First Nations Peoples. More generally, targets are problematic when they are only partially science based and include economic incentives to trade emissions above agreed targets, and when 'ambitious' targets are conditional. EDO **recommends** the Authority should avoid these circumstances.<sup>9</sup>

Australia's current emissions targets of a 43% reduction on 2005 levels by 2030, and net zero emissions by 2050, 10 do not sufficiently fulfil these criteria. In advising on new and updated targets,

<sup>&</sup>lt;sup>8</sup> See: EDO, Submission to NOPSEMA on the Guideline on 'Consultation in the course of preparing an Environment Plan' 15 March 2023.

<sup>&</sup>lt;sup>9</sup> Issues Paper, section 3.5, 24.

<sup>&</sup>lt;sup>10</sup> Australian Government. DCCEEW. Australia's emissions projections 2022, available at <a href="https://www.dcceew.gov.au/sites/default/files/documents/australias-emissions-projections-2022.pdf">https://www.dcceew.gov.au/sites/default/files/documents/australias-emissions-projections-2022.pdf</a>.

the Authority should adopt a science backed approach, that considers Australia's fair share of the remaining emissions budget, <sup>11</sup> and which reflects the urgency of the emissions reduction task.

# 2.1 Australia's emissions target must be ambitious and reflect the urgency of emissions reduction task

Global heating will continue to increase in the near term in nearly all considered scenarios and modelled pathways. Deep, rapid and sustained GHG emissions reductions, reaching net zero  $CO_2$  emissions and including strong emissions reductions of other GHGs, are necessary to limit warming to 1.5°C or less than 2°C by the end of century. Mechanisms in climate legislation for emissions budgets and interim and long-term targets should clearly link to a temperature outcome corresponding to the goal of the Paris Agreement.

Under the baseline scenario, Australia is set to achieve only a 32% reduction on 2005 levels in 2030, which is 5% above Australia's emissions budget, and includes an adjustment for voluntary cancellation of Australian Carbon Credit Units (**ACCUs**). With 'additional measures' implemented under plans including the Government's Powering Australia Plan the projection will achieve 40% reduction on 2005 levels in 2030. This remains 1% above the 2021-2030 emissions budget and includes an adjustment for voluntary cancellation of ACCUs. Further emissions reductions are required to meet the emissions budget for Australia, and this is without consideration of Australia's significant contribution globally of Scope 3 emissions from our exported coal and gas.

The 2030 target of 43% reduction on 2005 levels must be realised for any real contribution to climate change mitigation. At this stage, Australia is not projected to meet this decline. This means a steeper decline rate and lower emissions target will be required by 2035, including short-lived emissions that are so detrimental to short-term exacerbation of climate change triggers. IPCC synthesis report (2023)<sup>12</sup> confirms that a net global fall of GHG emissions by 43% [34-60%] below 2019 levels is required by 2030, and 60% [49-77%] by 2035 to in pathways that limit warming to 1.5°C (> 50%) with no or limited overshoot. Therefore, to match the IPCC latest recommendations, Australia's current target of 43% would need to increase, *at a minimum*, to a 53% reduction below 2005 emissions levels by 2030, and a 67% reduction below 2005 emissions levels by 2035.

	Lower	Higher
	limit	limit
2030	46%	67%
2035	58%	81%

Table 1: Emissions reduction target range (below 2005 emissions) based on IPCC (2023)

<sup>&</sup>lt;sup>11</sup> See, Climate Action Tracker, 'Fair Share', available at <a href="https://climateactiontracker.org/methodology/cat-rating-methodology/fair-share/">https://climateactiontracker.org/methodology/cat-rating-methodology/fair-share/</a>.

<sup>&</sup>lt;sup>12</sup> IPCC Sixth Assessment Report.

However, these target estimates don't take into account Australia's 'fair share' of the global emissions reduction task, or what an equitable contribution by Australia would look like. An important concept in the Paris Agreement is the principle of 'common but differentiated responsibilities and respective capabilities, in light of different national circumstances'. For Australia, this means acknowledging we have historically benefitted from the use of fossil fuels, and continue to do so, including through our enormous fossil fuel exports. Australia also has the capability and capacity to mitigate, adapt and respond to climate change. A 2030 target which is consistent with two degrees of warming therefore not only spells disaster for our neighbours in the Pacific, but abrogates Australia's responsibility as a global citizen. 14

Emissions targets must also take into account reporting failures and inaccuracies in our emissions contribution. For example, the latest International Energy Agency (**IEA**) methane tracking report found 2.23m tonnes of methane was released from energy production in Australia last year, 63% more than the federal climate change department estimate of 1.37m tonnes. <sup>15</sup> Coal mine methane specifically was found to be twice that reported by Government. <sup>16</sup> Reporting is discussed further below (at 3.5), but it is clear that targets must be set conservatively, on the basis of the precautionary principle, to ensure greater catch-up won't be needed as monitoring and accounting improves. EDO **recommends** Australia adopt a target to reduce greenhouse gas emissions by **74**% **of 2005 levels by 2030 and achieve net zero by 2035.** <sup>17</sup>

The Paris Agreement does not preclude nations from submitting targets and commitments beyond each country's domestic emissions. Given Australia's significant contribution to the climate crisis through our production and export of fossil fuels, EDO **recommends** emissions **target must include 'scope 3' emissions and goals for the phase out of fossil fuel production** (discussed further at 3.3).

<sup>&</sup>lt;sup>13</sup> Paris Agreement 2015, article 2.

<sup>&</sup>lt;sup>14</sup> Climate Analytics, Australian Election 2022 Political party and independent climate goals: analysis, available at https://climateanalytics.org/media/auselection22\_partyclimategoals\_climateanalytics\_1.pdf.

<sup>&</sup>lt;sup>15</sup> Adam Morton, The Guardian, 'Methane from Australian coal and gas could be 60% higher than estimated' (24 Feb 2023) available at: <a href="https://www.theguardian.com/environment/2023/feb/23/methane-from-australian-coal-and-gas-could-be-60-higher-than-estimated">https://www.theguardian.com/environment/2023/feb/23/methane-from-australian-coal-and-gas-could-be-60-higher-than-estimated</a>, IEA Global Methane Tracker 2023 < <a href="https://www.iea.org/reports/global-methane-tracker-2023#:~:text=About%20this%20report,warming%20and%20improving%20air%20quality">https://www.iea.org/reports/global-methane-tracker-2023#:~:text=About%20this%20report,warming%20and%20improving%20air%20quality</a>>

<sup>&</sup>lt;sup>16</sup> See Ember, 'Tackling Australia's Coal Mine Methane Problem' June 2022, available at <a href="https://ember-climate.org/insights/research/tackling-australias-coal-mine-methane-problem/">https://ember-climate.org/insights/research/tackling-australias-coal-mine-methane-problem/</a>.

<sup>&</sup>lt;sup>17</sup> EDO, Legal Letter Warns PM Over Failure to Protect Great Barrier Reef, November 16, 2021.

### 3. Cross-cutting climate issues

This part addresses several cross-cutting climate change issues raised by the Authority, relating to leading indicators; sectoral pathways; contributions beyond Australia's border; the NGER Act review; and carbon credit integrity.

#### 3.1 A rapid phase out of fossil fuel production is essential

Genuine or real net zero targets and pathways require a stop to new fossil fuels, and a phase out of existing fossil fuels consistent with the science.

As confirmed by the International Energy Agency (IEA):

- There can be no new coal, oil or gas, and no expansion of existing fossil fuel infrastructure.
- Mitigation and abatement measures resulting in steep and immediate declines in greenhouse gases are necessary to achieve real net zero.
- There are no effective or credible pathways currently available to offset or mitigate new or expanded fossil fuels. Carbon capture and offsetting are false solutions and should not be used in place of real and rapid carbon abatement.

The IPCC has made clear that emissions from existing fossil fuel infrastructure will push the world beyond 1.5°C of warming, and that "[g]lobal warming is more likely than not to reach 1.5°C between 2021 and 2040 even under the very low GHG emission scenarios." It goes on to say "Pathways consistent with 1.5°C and 2°C carbon budgets imply rapid, deep, and in most cases immediate GHG emission reductions in all sectors."

Similarly, the IEA has concluded that the scientifically credible pathway to limiting warming to 1.5°C – the goal of the Paris Agreement – requires that no new gas and oil fields be approved for development after 2021.<sup>20</sup> The United Nations Secretary-General has warned that "[i]nvesting in new fossil fuel infrastructure is moral and economic madness."<sup>21</sup>

Achieving real net-zero requires a plan that relies on mitigation and abatement measures that are certain to result in a steep and immediate decline in greenhouse gas emissions, rather than overreliance on emergence of new unproven technologies and offsets. The more our plan to reach net zero relies on offsetting rather than real emissions reduction, the more we risk overshoot.

In this context, EDO **recommends** the approval of new and extensions of fossil fuel infrastructure must be a leading indicator for measurement of progress to net zero. That is, policies must address

<sup>20</sup> International Energy Agency, 'Net Zero by 2050: A Roadmap for the Global Energy Sector – Summary for Policymakers' (May 2021), 11, <a href="https://iea.blob.core.windows.net/assets/7ebafc81-74ed-412b-9c60-5cc32c8396e4/NetZeroby2050-ARoadmapfortheGlobalEnergySector-SummaryforPolicyMakers\_CORR.pdf">https://iea.blob.core.windows.net/assets/7ebafc81-74ed-412b-9c60-5cc32c8396e4/NetZeroby2050-ARoadmapfortheGlobalEnergySector-SummaryforPolicyMakers\_CORR.pdf</a>.

 $<sup>^{\</sup>rm 18}$  IPCC Sixth Assessment Report, Figure 3.5, 56.

<sup>19</sup> Ibid, 46.

<sup>&</sup>lt;sup>21</sup> UN Secretary-General Antonio Guterres, 'Secretary-General Warns of Climate Emergency, Calling Intergovernmental Panel's Report 'a File of Shame', While Saying Leaders 'Are Lying', Fuelling Flames' (Media Release SG/SM/21228, 4 April 2022)' (2022) United Nations, <a href="https://press.un.org/en/2022/sgsm21228.doc.htm">https://press.un.org/en/2022/sgsm21228.doc.htm</a>.

the supply side of the energy transition (discussed further at 3.2). Simply bringing more renewables online will not address the climate crisis. The Federal Government must stop<sup>22</sup> approving new, and expansions of, fossil fuel infrastructure, and tracking of this should constitute a leading indicator of Australia's climate action progress.

#### 3.2 Climate change considerations must be integrated across all sectors

While EDO is pleased to see progress in the energy sector in relation to new renewable infrastructure, there remain serious gaps across sectors in Australia's response to climate change. For example, the key regulatory scheme at the federal level, the Safeguard Mechanism, applies to only 215 of the largest industrial emitters in the country and only accounts for scope 1 reductions. Yet the existence of the policy is often cited as a reason not to integrate climate considerations into other regulatory frameworks. EDO is of the view climate change should inform decision-making across the economy, and cannot be siloed to one discrete policy area.

For example, EDO **recommends** the adoption of relevant duties in decision-making, a policy which would reflect the need to incorporate climate informed planning across sectors. Duties should extend to all relevant decision makers, not just a Climate or Environment Minister. Relevant public authorities and entities should be required to consider the potential risks of climate change and report on material risks when performing their duties or exercising their powers.<sup>23</sup>

More broadly, EDO's work spans across different sectors, and we would be pleased to provide further comment on any of the following areas:

- In relation to transport, EDO supports decarbonisation initiatives like the proposed fuel efficiency standard (EDO submission), but notes that much more needs to be done to address the health impacts of air pollution from transport, including through uptake of EVs, as well as better public and active transport.
- Environmental laws must integrate climate considerations, and EDO is engaging with the reform of the *Environment Protection and Biodiversity Act 1999* to ensure climate considerations are sufficiently reflected on our national environmental and planning laws.
- The indivisibility of the health of the environment and human health and wellbeing is increasingly being acknowledged globally. The health impacts of climate change will only continue to increase, and health must be an integral consideration in the Authority's work. (See also 1.2 above.)
- Decarbonisation in the energy sector will be driven by both demand and supply side policies. We need clear mechanisms to facilitate a planned phasing out of fossil fuel energy sources and fossil fuel production according to a legislated timeframe. EDO supports the phase out of fossil fuel subsidies and tax concessions that create incentives to pollute, but also the prohibition of public financing for new fossil fuel projects.

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<sup>&</sup>lt;sup>22</sup> See e.g. Lisa Cox, The Guardian, 'Albanese government approves first new coalmine since taking power' 12 May 2023, <a href="https://www.theguardian.com/environment/2023/may/11/albanese-government-approves-first-new-coal-mine-since-taking-power">https://www.theguardian.com/environment/2023/may/11/albanese-government-approves-first-new-coal-mine-since-taking-power</a>.

<sup>&</sup>lt;sup>23</sup> See EDO, Roadmap for Climate Reform, 14.

- The necessary energy transition policy must leave no sector or community behind and government must lead genuine transition planning for affected coal communities, workers in high emissions intensity industries and sectors, and highly impacted communities. A range of opportunities need to be consulted upon, including reskilling workers to emerging industries, and identifying opportunities for impacted communities, First Nations and rural landholders to benefit from the renewable energy transition.

# 3.3 Australia must assess its contribution to global climate change through fossil fuel exports

As recognised by the Authority, Australia's fossil fuel production and exports make a significant contribution to global emissions.<sup>24</sup> Most of Australia's fossil fuel production is exported, and Australia exports fossil fuels equal to 1.1 billion tonnes of carbon dioxide per year, which is more than double of the GHG emissions that Australia emits domestically.<sup>25</sup> In CO<sub>2</sub> potential, Australia is the third biggest fossil fuel exporter globally, coming behind only Russia and Saudi Arabia, and our exported fossil fuel emissions currently represent around 3.6% of global emissions.<sup>26</sup>

According to the IPCC synthesis report, about 80% of coal, 50% of gas, and 30% of oil reserves cannot be burned and emitted if warming is limited to  $2^{\circ}$ C. Significantly more reserves are expected to remain unburned if warming is limited to  $1.5^{\circ}$ C. An independent study<sup>27</sup> also provides an estimate of committed emissions from developed fossil fuel reserves - 936 Gt CO<sub>2</sub> (2022), comprising 47% from coal, 35% from oil and 18% from gas. Staying within a  $15^{\circ}$ C carbon budget (50% probability) implies leaving almost 40% of 'developed reserves' (already discovered and for which financial and regulatory commitment to extraction has been made) of fossil fuel unextracted.

This means that developed reserves substantially exceed the 1.5°C carbon budget. Therefore, governments, including Australia, should not only cease to license and develop new fields and mines, but also to prematurely decommission a significant portion of those already developed. This has implications for the export and sale of Australian resources overseas.

Australia's current and future planned expansion in the exploitation of fossil fuel resources goes against global efforts to combat climate change. It represents a failure to take seriously our obligations under the World Heritage Convention (i.e. relating to the Great Barrier Reef)<sup>28</sup> and the well-established 'no harm' rule of customary international law.<sup>29</sup> Moreover, arguments against accounting for and reducing our exported emissions have failed to hold up to scrutiny.

<sup>&</sup>lt;sup>24</sup> Issues paper, 23.

<sup>&</sup>lt;sup>25</sup> Tom Swann, *High Carbon from a Land Down Under: Quantifying CO2 from Australia's fossil fuel mining and exports* (Australia Institute 2018) 22-23.

<sup>&</sup>lt;sup>26</sup> TAI, Climate Analytics, *Evaluating the Significance of Australia's global fossil fuel carbon footprint* (Report, July 2019) 16-17.

<sup>&</sup>lt;sup>27</sup> Trout et al. 2022. Existing fossil fuel extraction would warm the world beyond 1.5oC. *Envrion. Res. Lett.* 17.

<sup>&</sup>lt;sup>28</sup> EDO, Legal Letter Warns PM Over Failure to Protect Great Barrier Reef, November 16, 2021.

<sup>&</sup>lt;sup>29</sup> Which is included in international agreements to which Australia has ratified E.g., the Convention on Biological Diversity.

For example, the Authority raises the substitution argument as global risk if Australia reduces its exports. The substitution argument is weak based on economic analyses.<sup>30</sup> Supporting a more rapid transition is an important component of an international effort.

The most important consideration for Australia's NDC is the global nature of the impacts from GHG emissions. Australians are already, and will continue to, feel the consequences of climate change. EDO **recommends** taking responsibility to reduce GHG emissions to mitigate impacts to Australia and Australians should be at the core of setting the NDC, and this can only be done with consideration of the contribution from exported emissions. Ultimately, fossil fuels need to stay in in the ground, and Australia is one of the leading contributors to extraction of these fossil fuels.

#### 3.4 Accurate emissions accounting is essential

Acceleration of emissions reductions can only be done when fugitive emissions and all GHGs are measured and reported accurately to properly access the decline rate required for effective emissions reductions.

In the DCCEEW projections fugitive emissions increase from 53 MtCO<sub>2</sub>-e in 2020 to 55 Mt CO<sub>2</sub>-e by 2030 and holds steady to 2035.<sup>31</sup> Fugitive emissions are likely underestimated in all reporting under the NGER Act. To ensure this increase does not occur, EDO **recommends** monitoring fugitive emissions should be a key component of emissions reporting. Studies show that identifying and addressing a few, high-emitting sources (super-emitters) provides opportunity to drastically reduce emissions. The intermittent and unintentional nature of fugitive emissions means continuous monitoring systems with intelligent analytics are required. These technologies do exist and ought to be considered feasible for implementation by high-emitting industries. Calculations based on assumptions is feasible and should be mandatory on all fossil fuel emitting infrastructure.

Reporting and calculation of methane must also be greatly improved. As noted above, Australia's reported methane emissions have been significantly underreported, and it is essential Australia take steps to increase direct measurement of fossil methane everywhere possible, and invest in improving the quality and accuracy of estimates where it is not.<sup>32</sup> Specifically, the Authority should focus on ensuring facilities directly measure their methane emissions from all sources at a given facility (i.e. source-level measurement), and cross-check those emissions with aerial, drone or satellite measurements (i.e. site-level measurement). Greater collection and publication of methane data is also essential, i.e. from all facilities covered by the NGER Act, not only limited to facilities covered by the Safeguard Mechanism.

<sup>&</sup>lt;sup>30</sup> See Waratah Coal Pty Ltd v Youth Verdict Ltd & Ors (No 6) [2022] QLC 21.

<sup>&</sup>lt;sup>31</sup> Australian Government. DCCEEW. Australia's emissions projections 2022, table 5.

<sup>&</sup>lt;sup>32</sup> Energy and Resource Insights, Monitoring, reporting and verification of fossil methane in Australia (Briefing Report, March 2023) <a href="https://energyresourceinsights.com/wp-content/uploads/2023/03/FossilMethaneInAustralia.pdf">https://energyresourceinsights.com/wp-content/uploads/2023/03/FossilMethaneInAustralia.pdf</a>.

#### 3.5 Carbon credit integrity issues must be resolved

The increasing use of carbon offsets undermines the urgent task of reducing fossil fuel emissions, particularly where carbon offsets are shown to be falling short of best practice. Offsets are not an alternative to real emissions reductions and should only be used as a last resort to neutralise residual emissions estimated by a credible sector-specific 1.5°C pathway. Carbon offsets therefore must not be used to justify expansion of fossil fuels.

EDO has several concerns about the use and integrity of carbon offsets, both by private actors for voluntary plans, but also under regulatory schemes. Carbon offsets are heavily relied in net zero plans, for example by the private sector. The more a net zero plan relies on offsetting and reliance on unproven technology rather than real emissions reduction, the more risk of overshoot. We refer the Authority to EDO's work on corporate greenwashing.<sup>33</sup>

EDO has undertaken a legal analysis of the current carbon offsetting scheme, and we refer the Authority to our **EDO submission to the Independent Review of Australian Carbon Credit Units.** This submission identifies a number of integrity and governance issues with the current scheme and we support the full implementation of the Chubb Review recommendations as a starting point to address the significant concerns.

Both the inherent uncertainties in quantification of carbon offsets and the problem of permanence (e.g. forest fires destroying carbon sinks) mean that units of carbon abatement sold as credits rarely represent the amount of pollution they have been purchased to offset on a tonne for tonne basis.<sup>34</sup> Additionally, over time, natural carbon storage becomes less effective due to oversaturation of land and ocean sinks with cumulative emissions, leading to more CO<sub>2</sub>-e remaining in the atmosphere.<sup>35</sup> As such, using carbon credits to cancel out carbon emitted elsewhere risks resulting in an overall increase in pollution.

Given the serious integrity issues and serious doubt raised as to whether carbon offsets are achieving the actual outcomes, EDO **recommends** that offsets should not be allowed to be used to meet regulatory targets. We refer the Authority to our **submissions on reform of the Safeguard**Mechanism.<sup>36</sup> We raised concerns about the use of 100% offsetting to meet targets as falling well short of best-practice. Allowing full use of offsets to meet targets, instead of actual emissions

<sup>&</sup>lt;sup>33</sup> EDO has also provided a comprehensive submission to the Senate Standing Committees on Environment and Communications inquiry on Greenwashing. The submission will be available online here: <a href="https://www.aph.gov.au/Parliamentary\_Business/Committees/Senate/Environment\_and\_Communications/Greenwashing/Submissions">https://www.aph.gov.au/Parliamentary\_Business/Committees/Senate/Environment\_and\_Communications/Greenwashing/Submissions</a>

<sup>&</sup>lt;sup>34</sup> See Derik Broekhoff, Expert Report (4 July 2022) available at https://www.clientearth.org/media/exyfip2p/productie-4-broekhoffexpert-report-v2-2-final.pdf. See also, Climate Analytics calculated that every carbon credit used to offset one tonne of CO2 from liquified natural gas production in Australia led to about 8.4 tonnes of CO2 going into the atmosphere, once the gas was sold and burned overseas (reported in the Guardian 11 February 2023 https://www.theguardian.com/environment/2023/feb/11/labors-unlimited-use-of-carbon-offsets-could-lead-to-rise-in-emissions-report-says)

<sup>35</sup> Intergovernmental Panel on Climate Change Assessment Report 6 (IPCC AR6), WI, 20, with "high confidence".

<sup>&</sup>lt;sup>36</sup> See specifically EDO, Submission to the Senate Standing Committee on Environment and Communications inquiry into the Safeguard Mechanism (Crediting) Amendment Bill 2022 and EDO, Submission on amendments to the Safeguard Rule 24 February 2023.

reduction, undermines the integrity of the scheme as a whole. Our submissions detail a range of options for limiting ACCU use for regulatory compliance, including the possibility of discounting or limiting use to a certain percentage of the required baseline.

In recommending the necessary and effective targets for Australia, EDO **recommends** the Authority should encourage adoption of *real* net zero, such that carbon credits can only be used as a last resort to neutralise residual emissions. Where the domestic market for ACCU generation remains, EDO **recommends** the Authority consider further integrity measures to ensure permanence and additionality of credits, and transparent methodology with strict oversight rules.

Thank you for the opportunity to make this submission.

Please do not hesitate to contact our office should you have further enquiries.