



EDOs of Australia

Submission on Australia's Climate Change Policy Review

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EDOs of Australia (formerly the Australian Network of Environmental Defender's Offices) consists of eight independently constituted and managed community legal centres located across the States and Territories.

Each EDO is dedicated to protecting the environment in the public interest. EDOs:

- provide legal representation and advice,
- take an active role in environmental law reform and policy formulation, and
- offer a significant education program designed to facilitate public participation in environmental decision making.

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Executive Summary

EDOs of Australia welcome the opportunity to comment on the Climate Change Policy Review. As a national network of community legal centres specialising in environmental law, we support a just and rapid transition to clean energy, productive livelihoods, and a safe and stable climate in which humanity and other species can flourish.

Climate change is already having adverse impacts on the Pacific region and the Australian environment, economy and society. We live on the driest inhabited continent, one of 17 ‘megadiverse’ countries for biodiversity. Our population hugs the coastline and weathers intense storms, drought and bushfire. This review must consider the likely impacts of 2 degrees warming for present and future generations, and the risks of adopting policies and targets that fail to fulfil the Paris Agreement. Otherwise we risk inadequate policy responses to serious and system-wide impacts.

On the other hand, ambitious Australian leadership to reduce emissions now and over the next three decades can have a ripple effect across our region and the world. This submission outlines 12 main recommendations for the future of Australia’s climate policy, to be implemented with appropriate regulatory backing. These are:

- 1. Set long-term and interim reduction targets in climate legislation that will achieve the Paris Agreement’s goals3**
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We address each of these main recommendations in more detail below.

1. Set long-term and interim reduction targets in climate legislation that will achieve the Paris Agreement's goals

The Paris Agreement sets a clear goal to hold global warming to 'well below' 2 degrees and pursue efforts to limit the average temperature increase to 1.5 degrees. Ambitious Australian leadership to reduce emissions now and over the next three decades can have a ripple effect across our region and the world. It is better for the Government to set realistic and ambitious targets that will meet this goal, than to 'meet and beat' low-ambition targets that fail to avoid dangerous climate change.

To implement climate change goals effectively, enacting legislation is a robust way to guide and achieve emissions reduction. This provides far greater certainty, longevity and transparency, and ensures proper process compared to relying on policy alone.

Ambitious and realistic future targets needed

The Government's review should propose strengthened emissions reduction targets for 2020, 2030 and beyond. We recommend four steps here.

First, to increase the positive contribution to reducing emissions, Australia should not rely on the 'credits' it banked in the first Kyoto period to meet its second period commitment to 2020.¹

Second, Australia should aim to go beyond its minimum 5% emissions reduction commitment by 2020, and adopt the optional efforts it has previously negotiated.²

Third, consistent with the Paris Agreement process, Australia should set more ambitious targets for 2025, 2030 and beyond. Australia's current 2030 target (26-28% reduction on 2005 emissions) is well below the target recommended by Climate Change Authority in 2014, and below the targets adopted by many other countries.³ The Climate Change Authority assessed a fair and realistic contribution for Australia. It recommended a 30% reduction on 2000 levels by 2025; and subject to future circumstances, a 40 to 60% reduction by 2030.⁴ We note that these realistic targets would need to be supported by appropriate institutional, market and regulatory measures.

Fourth, the Australian Government should use the momentum of recent state government commitments to achieve 'net-zero emissions'⁵ to support an equally

¹ See, 'Climate Law' in *The Future of Australian Environmental Laws* (2017), Australian Panel of Experts in Environmental Law (APEEL), recommendation 5.2. See also Australian Government, *Tracking to Australia's Emissions reduction targets* (2016).

² Under the Kyoto Protocol, Australia negotiated a 108% increase on its 1990 emissions in the first period (2008-2012); in the second period, Australia committed to 5% emissions reduction on 2000 emissions by 2020, and retained an option to increase this to 15-25% reduction under certain circumstances. See UNFCCC Kyoto Protocol, Doha Amendment: http://unfccc.int/kyoto_protocol/doha_amendment/items/7362.php.

³ Including the UK, Switzerland, Germany, Norway, the US, the EU, Canada and New Zealand. See Fraser, B., 'Some observations on Australia's post-2020 emissions reduction target', Climate Change Authority, 14 August 2015, Table 1.

⁴ Australian Government Climate Change Authority, *Reducing Australia's Greenhouse Gas Emissions: Targets and Progress Review – Final Report* (2014), available at:

<http://www.climatechangeauthority.gov.au/reviews/targets-and-progress-review-3>.

⁵ In NSW, South Australia, Victoria, ACT and potentially other jurisdictions around Australia.

realistic and ambitious national target to 2050; and should collaborate further with state ministers to plan for a positive climate future. Strengthened interim and long-term targets should continue to become more achievable because, according to the Government's own recent projections, to reach the minimum of 26% reduction over the period of 2021-30, 'the emissions abatement task has... more than halv[ed]'.⁶

In summary, stronger targets to 2020 and 2030 will ensure greater upfront reductions and make the task more manageable and cost-effective in the decades to 2050 and beyond – to meet the agreed goal of capping global warming 'well below' 2 degrees.

New climate law needed to implement targets

Many countries, states and provinces across the world have adopted specific emissions reduction targets in legislation. To give an example, the *Climate Change (Scotland) Act 2009* places a legal duty on the Scottish Ministers to 'ensure that the net Scottish emissions account for the year 2050 is at least 80% lower than the [1990] baseline'. It also legislates an interim target for 2020, subject to expert advice. Closer to home, South Australia, the ACT, Tasmania and Victoria have all passed climate laws with emissions reduction targets (see **Attachment A**).

We strongly recommend the Australian Parliament pass climate legislation to support the implementation of Australia's contributions to the Paris Agreement. Specifically, this new federal climate legislation should:

- set a long-term target for reducing greenhouse gas emissions (e.g. 2050);
- set interim reduction targets (e.g. five-yearly, consistent with Paris reviews);
- adopt a 'carbon budget' approach with mechanisms for implementation, monitoring and reporting;
- place duties on Australia's ministers to meet these targets;
- set out a process for a long-term low greenhouse gas emission development strategy;⁷
- establish expert advisory bodies to advise Government and the Parliament on science and policy (where appropriate, with reference to existing bodies); and
- integrate with existing environmental protection and climate change laws.⁸

2. Put a price on pollution

Australia's climate policy should internalise environmental costs in decision-making, including via a 'polluter pays' approach, by putting a price on greenhouse gas pollution. This reflects key principles of Ecologically Sustainable Development (ESD) – a concept which underpins federal and state environmental protection and pollution laws.

⁶ Department of Environment and Energy, *Tracking to Australia's emission reduction targets* (2016).

⁷ As encouraged under the Paris Agreement and referred in the Government Discussion Paper (p 9).

⁸ Such as the *Environment Protection and Biodiversity Conservation Act 1999* (including new triggers relevant to climate change, discussed below), the *Carbon Credits (Carbon Farming Initiative) Act 2011* and the *Renewable Energy (Electricity) Act 2000*.

Pricing emissions is a vital component of the climate response toolkit. It could include a direct price per ton of emissions, a broadly-targeted emissions trading scheme, or sector-specific solutions such as an emissions intensity scheme for electricity generators.⁹ By discouraging heavy emissions and creating incentives to use and develop cleaner alternatives, the resulting price signal can make significant inroads into emissions reduction. Importantly, a price on emissions must be combined with other tools. It is not a substitute for other necessary regulatory and non-regulatory policies.

3. Consider risks and impacts of 2 degrees warming (or higher) when assessing 'policy impacts'

The Discussion Paper refers to the need to consider a range of 'policy impacts' including on jobs, trade and investment, housing and regional areas. We recommend the Government must consider the following additional factors that are not identified in the Discussion Paper, but that are crucial to the climate policy review:

- the already foreseeable impacts of climate change, and costs of adaptation;
- the potential to reduce the cost of adaptation by mitigating emissions early;
- the risks of inadequate policies that fail to keep warming below 2 degrees, including the impacts of present actions and decisions on future generations.

A failure to consider these factors poses a risk of inadequate policy responses, particularly give the serious, system-wide adverse effects of climate change.

Climate change is already having adverse impacts on the Australian environment, economy and society, with the ongoing bleaching of the Great Barrier Reef being a symbolic example. We inhabit the driest continent – which is also one of only 17 'megadiverse' countries for flora and fauna. Eighty-five per cent of Australians live within 50km of the coast,¹⁰ meaning billions of dollars are at risk from increased natural disasters.¹¹

One degree average warming is already having significant impacts across the Pacific region and globally, with flow-on costs for Australia and severe effects on our island neighbours. Without concerted and rapid action from all nations – including Australia as a highly-developed nation, a major fossil fuel exporter and one of the world's

⁹ See for example, Climate Change Authority (CCA), *Policy options for Australia's electricity supply sector, Special Review research report* (2016)

<http://climatechangeauthority.gov.au/sites/prod.climatechangeauthority.gov.au/files/files/SR%20Electricity%20research%20report/Electricity%20research%20report%20-%20for%20publication.pdf>; and CCA, *Towards a climate policy toolkit: Special Review of Australia's climate goals and policies* (2016)

<http://climatechangeauthority.gov.au/sites/prod.climatechangeauthority.gov.au/files/files/Special%20review%20Report%203/Climate%20Change%20Authority%20Special%20Review%20Report%20Three.pdf>; see also Hamilton, C. and Karoly, D. *Climate Change Authority's Special Review on Australia's Climate Goals and Policies: Towards a Climate Policy Toolkit: Minority Report*, 5 Sept 2016 (p 18).

¹⁰ Australian Bureau of Statistics, *Regional Population Growth, Australia and New Zealand, 2001-02*, cat. no. 3218.0, at

<http://www.abs.gov.au/Ausstats/abs@.nsf/Previousproducts/1301.0Feature%20Article32004>.

¹¹ 63 billion dollars' worth of residential buildings are at risk of inundation with a 1.1m sea level rise according to the Department of Environment and Energy: <http://www.environment.gov.au/climate-change/adaptation/publications/climate-change-risks-australias-coasts>.

highest carbon footprints per capita – the world risks catastrophic impacts of warming greater than two degrees.

To avoid more serious and irreversible impacts from climate change, Australian policymakers must take preventative and precautionary measures, and ensure that emissions reduction policies are informed by up-to-date, best-available science, and err on the side of ambition and precaution.¹²

4. Integrate climate considerations, emissions and targets in National Energy Market (NEM) laws and decisions

Australia's Energy and Environment Ministers should work closely to increase the integration of greenhouse emissions reduction into energy policy in order to limit the costs of a climate-changed world.¹³ Recent policies such as the revised federal Energy White Paper (2015) and COAG's National Clean Air Agreement (2015)¹⁴ have not grasped this opportunity. The combined energy-environment portfolio presents a further opportunity to integrate Paris commitments and targets into federal energy policy and legislation.

We recommend that the National Energy Objective (**NEO**) – set out in the National Energy Law as mirrored across the Commonwealth, states and territories – be amended to include environmental and climate change considerations. This would enable decisions by energy market regulators and participants that better account for immediate and longer-term climate risks and solutions.

The Australian Energy Market Agreement (2004) refers to climate change considerations, with the following goal:¹⁵

to address greenhouse emissions from the energy sector in light of the concerns about climate change and the need for a stable long-term framework for investment in energy supplies.

However, the Agreement is non-binding, and these climate considerations are not currently reflected *in law* under the NEO. Linking energy legislation objects to climate change goals can lay the groundwork for NEM decision-making to integrate emissions targets. The law should also give flexibility for those targets to increase.

Amendments to the NEO would need to be supported by coordinated, national law and policies to meet our Paris targets. For example, as explored in a recently Senate Inquiry, Australian energy policy should also address planning for high-polluting coal-fired power station closures, supported by national emissions standards.¹⁶

¹² The precautionary principle is a guiding principle of international and Australian environmental law, including under the EPBC Act. The Oslo Principles on Global Climate Change Obligations provide guidance on applying the precautionary principle in the context of climate change (Principle 1). Available at: <http://globaljustice.macmillan.yale.edu/sites/default/files/files/OsloPrinciples.pdf>.

¹³ See EDOs of Australia submissions on climate and energy policy at: <http://www.edo.org.au/energy1>.

¹⁴ See: <http://ewp.industry.gov.au/>; <https://www.environment.gov.au/protection/air-quality/national-clean-air-agreement>.

¹⁵ AEM Agreement (2004), 2.1(b)(vi). The Agreement contains a longer list of objectives than the NEO.

¹⁶ Inquiry into the retirement of coal-fired power stations - Final Report (2017), at http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Environment_and_Communications/Coal_fir

5. Strengthen the Safeguard Mechanism and national emissions standards for power stations and mines

Australia has no mandatory greenhouse efficiency standards that require power stations to reduce carbon emissions (as distinct from other air pollutants). Plans to introduce such standards were reversed when the former carbon price was adopted in 2012.

Recently, the Safeguard Mechanism under the Emissions Reduction Fund (**ERF**) has adopted a sector-wide emissions baseline (Discussion Paper p 5). However, at present this aims to prevent emissions leakage following voluntary, paid emissions reductions – rather than spurring continuous improvement and innovation. At a minimum, if the Safeguard Mechanism is to be effective in reducing emissions from electricity generation and other sectors, the Mechanism requires stronger baselines that increase over time, and broader scope to cover a range of activities below the current annual 100,000-ton (CO₂-e) emission threshold.¹⁷

In other jurisdictions, principles like ‘continual improvement’ and ‘best available’ technology are used to keep environmental and pollution standards up to date.¹⁸ This is consistent with the Paris Agreement approach of ratcheting-up targets. By way of example, in 2015 the United States Environmental Protection Agency (**US EPA**) began imposing national greenhouse gas emissions standards on existing and new or modified power plants via the Clean Power Plan and US *Clean Air Act*.¹⁹

While Australia currently lacks a federal EPA, a similar approach here would require new federal legislation.²⁰ If emissions standards and limits for power stations were integrated with state pollution laws (such as via the National Clean Air Agreement²¹), state mirror legislation or amendments may also be needed. Emissions standards could increase transparency and also reduce the cost of planned power station retirement.²² The design of such standards would need to complement other signals to internalise the public costs of pollution, and support reforms to the NEM.

Turning to the mining sector, there are similarly no nationally-harmonised and binding limits (or mandatory pricing) on fugitive emissions from coal and gas

ed_power_stations/Final_Report. See also EDOs of Australia submission at www.edo.org.au ([Download PDF](#)). See further Caldicott, B. et al., *Subcritical Coal in Australia: Risks to Investors and Implications for Policymakers* (2015), Smith School of the Environment, University of Oxford, at: http://www.smithschool.ox.ac.uk/research-programmes/stranded-assets/Subcritical%20Coal%20in%20Australia_Investors&Policymakers.pdf.

¹⁷ See for example, Australian Panel of Experts on Environmental Law, *Technical Paper 5 - Climate Law* (2017) at 3.3. Available at: <https://apeel-admin.squarespace.com/papers>.

¹⁸ See further EDOs of Australia, *Submission to the National Clean Air Agreement* (2015) p 8 [[PDF 479 KB](#)].

¹⁹ The *Clean Air Act* (US) enables the US EPA to set emission standards for air pollutants from new and existing sources (s 111). US EPA, *Overview of the Clean Air Act and Air Pollution Share* (2015): <https://www.epa.gov/cleanpowerplan/fact-sheet-overview-clean-power-plan>.

²⁰ See Australian Panel of Experts on Environmental Law, *Technical Paper 5 - Climate Law* (2017) at 3.3. Available at: <https://apeel-admin.squarespace.com/papers>.

²¹ Council of Australian Government (COAG), *National Clean Air Agreement* (2015), at: <http://www.environment.gov.au/protection/air-quality/national-clean-air-agreement>.

²² See Caldicott, B. et al., *Subcritical Coal in Australia: Risks to Investors and Implications for Policymakers* (2015). Available at: http://www.smithschool.ox.ac.uk/research-programmes/stranded-assets/Subcritical%20Coal%20in%20Australia_Investors&Policymakers.pdf.

extraction projects. As explored below, state planning and pollution regulators tend to avoid responsibility for regulating greenhouse gas emissions, leaving a regulatory gap. This is despite the continued growth of Australia's coal and gas industries, the significant global warming potential of methane, and the increasing contribution of fugitives to Australia's emissions.²³

6. Integrate emissions reduction in land-use planning and development laws, and mandate robust mainstream building sustainability standards

Amend state planning and development laws to assess and respond to climate impacts

Australians see the federal, state and territory governments as jointly responsible for climate change policy and action.²⁴ Integrating emissions reduction and adaptation into state and territory planning, development laws is crucial to achieve emissions targets; and prepare for unavoidable impacts to settlements, infrastructure, biodiversity and agriculture. The present lack of systematic requirements in state planning and pollution laws to consider, limit and reduce greenhouse gas emissions, or to ensure climate-readiness, is a critical gap that needs to be filled.

Land-use planning, development approval and pollution laws are largely state-based. However, state laws do not limit greenhouse gas emissions from mining, energy or infrastructure projects in order to meet state or national emissions reduction targets. Nor do state laws send market signals by internalising the costs of greenhouse pollution, via emissions trading schemes or 'load-based' licensing fees. This means important incentives to drive the clean energy transition are missing.

For example, the Western Australian EPA recently revised its statement of key issues that the EPA expects to be addressed in the environmental impact assessment of major projects (such as large mines, oil and gas projects). However, this Statement contains no mention of climate change or carbon pollution.²⁵

In 2016 EDO NSW published a report on *Planning for Climate Change: How the NSW planning system can better tackle greenhouse gas emissions*.²⁶ The report provides a framework to analyse six stages of state planning systems and makes 14 recommendations to build emissions reduction into the aims, processes and outcomes of NSW planning laws. This review should consider the 14 proposals in identifying how state law and policy can integrate with national emissions reductions. They include linking planning laws and their aims to emissions reduction, requiring

²³ Fugitive emissions amounted to almost 8% of domestic emissions in 2015 – separate to the emissions from the burning of Australian-mined fossil fuels domestically and overseas. See Australian Government, *Australia's emissions projections 2016* (2016), Table 2 and pp 16-18.

²⁴ See Leviston et al., *Australian attitudes to climate change 2010-2014* (2015), CSIRO, pp 15 and 64.

On average, federal and state governments' responsibility for responding to climate change was rated at 3.87 and 3.73, where 5 is highly responsible and 1 is not at all responsible. Local government was rated lower at 3.59.

²⁵ Environment Protection Authority Western Australia, *Statement of Environmental Factors, Principles and Objectives* (2016), at:

http://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/Statement%20of%20Environmental%20Principles%2C%20factors%20and%20objectives_Dec16_1.pdf

²⁶ Available at http://www.edonsw.org.au/planning_for_climate_change.

proponents to submit a climate impact statement, and requiring decision-makers to explicitly consider climate mitigation and adaptation and impose effective conditions.

Harmonise building sustainability standards (energy, water, carbon, waste, transport) and mandate 'continuous improvement' in mainstream design and construction

We recommend the federal, state and territory governments increase efforts to harmonise building sustainability measures, ratings, standards and efficiency reporting. As Australia's economy and population continue to grow, so will the carbon footprint of our cities and towns. This is clear from recent and rapid growth in transport emissions. The absence of mandatory sustainability standards, and nationally comparable reporting, will significantly increase the pressure our built environment places on the natural environment.

The Discussion Paper refers briefly to the Building Code of Australia and to voluntary green building standards (p 18) – but this approach continues to distinguish between the sustainable property 'sector' and the mainstream. We recommend much greater focus on 'mainstreaming' building sustainability by developing national, mandatory minimum standards.

We recommend harmonised, mandatory building sustainability standards that:

- apply across residential, commercial, industrial and infrastructure sectors (new building developments and precincts, and existing building retrofits);
- maximise efficiency for energy, water, thermal comfort, carbon and appliances (taking account of regional differences in climate, hydrology and geography);
- minimise embodied energy and waste from construction and operation;
- move over time from low-carbon to zero-carbon to carbon-positive living; and
- ensure inclusive, liveable communities with active transport and connections to nature.

The benefits of harmonised measurement and building standards include supporting competition and innovation; improving Australian communities' climate-readiness and disaster resilience; addressing both mitigation and adaptation upfront; while embedding a culture of continuous improvement in the architecture, property development and construction sectors.

A recent example of advanced sustainability is the UrbanGrowth NSW draft sustainability strategy. It aims for settlements on NSW government land to be carbon neutral, water positive and create zero waste; with additional goals and targets for healthy and inclusive places; productive cities; collaboration and accountability.²⁷

7. Decision-makers must consider the risks and impacts of exported (scope 3) emissions

One of the biggest challenges for Australia's contribution to global warming is 'scope 3' emissions, predominantly downstream emissions from the burning of exported

²⁷ <http://www.urbangrowth.nsw.gov.au/sustainability>, accessed 1 May 2017.

thermal coal. Although carbon accounting rules attribute scope 3 emissions to the end-use country, like other economies reliant on emissions-intensive exports, Australia cannot escape the fact that we share one atmosphere; that coal is the most carbon-polluting energy source; and our exported emissions contribute to a severe collective problem.

To have a realistic change of avoiding 2 degrees warming, Australia needs to reduce domestic emissions and, at the same time, transition our jobs, communities and industries away from exporting greenhouse gas emissions.

Decision-makers such as government planning authorities, business and industry executives and investors alike need to do more to build-in the consideration of environmental, social and financial risks of continued reliance on fossil fuel exports.²⁸ These risks include the potential to be left with stranded assets if nations make good on their Paris commitments to decarbonise;²⁹ and the risk of ‘grave and potentially catastrophic changes in the climate’ if globally we fail to do so.³⁰

We recommend the climate policy review take into account these important risk considerations, and consider how these risks can be built into private and public sector decision-making. One example is to reform corporate disclosure laws and directors’ responsibilities. Another is to require major project proponents to prepare a standalone Climate Impact Statement for decision-makers to assess under planning and environmental laws.³¹ A third complementary way of ensuring cumulative exported emissions are considered is to enact a ‘climate change trigger’ under the EPBC Act (below) – to coordinate national oversight of high-emissions projects, refuse unacceptable impacts, and protect the global atmosphere and ecosystems.

8. Adopt a climate change impact trigger and land-clearing trigger under national environmental law (EPBC Act)

Australian communities expect their Government to maintain strong, coordinated national environmental laws – including in relation to climate change. This includes controlling the impact of energy projects like power stations or coal and gas mines;³² and ensuring that emissions reductions in the land sector are not undercut by regressive state land-clearing laws. We recommend greater federal oversight of

²⁸ APRA is the latest to highlight the need to address climate considerations in corporate decision-making. See Summerhayes, G., ‘Australia’s new horizon: Climate change challenges and prudential risk, Insurance Council of Australia annual forum, Australian Prudential Regulatory Authority, 17 Feb 2017.

²⁹ See further Caldicott, B. et al., *Subcritical Coal in Australia: Risks to Investors and Implications for Policymakers* (2015). Available at: http://www.smithschool.ox.ac.uk/research-programmes/stranded-assets/Subcritical%20Coal%20in%20Australia_Investors&Policymakers.pdf.

³⁰ *Oslo Principles on Global Climate Change Obligations* (2015), ‘Preamble’, principles 1, 8, 21; and 27-30 (on corporate obligations). See: <http://globaljustice.macmillan.yale.edu/sites/default/files/files/OsloPrinciples.pdf>.

³¹ EDO NSW, *Planning for Climate Change* (2016), recommendation 5. This document would state:

- how the project proposal contributes to relevant goals and targets to reduce greenhouse gas emissions;
- specific measures to avoid, minimise and (if appropriate) offset emissions from the project;
- the measures in place to ensure downstream emissions are avoided, minimised and offset;
- the full cost of the project’s emissions; and
- full and proper consideration of alternative options.

³² See for example, Moffat et al. (2014), *Australian attitudes toward mining citizen survey 2014 report*, CSIRO, <http://www.csiro.au/en/Research/MRF/Areas/Community-and-environment/Resources-in-the-community/Attitudes-to-mining-survey>.

emissions-intensive projects and activities that deplete carbon storage, by making certain development proposals subject to two new triggers under the *Environment Protection and Biodiversity Conservation Act 1999* (**EPBC Act**).

Climate change trigger

A 'greenhouse trigger' was discussed two decades ago, in the lead-up to the EPBC Bill 1998 being introduced, to enable greater oversight of emissions in national environmental law. The independent Hawke Review of the *EPBC Act 1999* also recommended a greenhouse trigger, pending the introduction of a carbon price (as proposed at the time).³³

The current review is timely given the EPBC Act is due for another review in 2018. In the meantime however, the absence of a climate change trigger continues to be a serious omission from the national environmental law. This has contributed to Australia's disconnected climate change responses over the last two decades, and is compounded by the gaps in state planning law (above).

To be effective, the new climate change trigger would require federal assessment of high-emissions projects from a national perspective (including any downstream 'scope 3' emissions). The Environment Minister would be required to:

- assess if the proposed activity is consistent with Australia's domestic and international climate commitments, and the goals of the Paris Agreement more broadly (including to keep average warming well below 2 degrees);
- refuse projects that are likely to have or contribute to 'unacceptable impacts' on the climate or biosphere; and
- place conditions on projects to deal with greenhouse gas emissions (and/or climate adaptation) not dealt with effectively by any state-based approval.

Land-clearing trigger

Clearing of native vegetation has a range of well recognised and serious consequences. Successive *State of the Environment* Reports highlight this threat,³⁴ and land clearing has accelerated in some areas since 2011.³⁵ State and territory laws have limited effectiveness and strategic oversight of national land clearing. Significant levels of clearing are still lawful, illegal clearing continues with limited resourcing for enforcement, and state laws are being weakened.

We recommend a new EPBC Act land-clearing trigger to ensure that federal efforts on biodiversity, landscape-scale conservation and emissions reduction are not undermined by a constantly changing patchwork of state land clearing laws. This

³³ Hawke, A., *Report of the Independent Review of the EPBC Act 1999* (2009), recommendation 10. Available at: <http://www.environment.gov.au/resource/australian-environment-act-report-independent-review-environment-protection-and>.

³⁴ The SOE Report 2001 identified land clearing the single biggest threat to wildlife in Australia. The SOE Report 2006 found that the 'loss of native vegetation continues to be one of the greatest threats to Australia's biodiversity'. The SOE Report 2011 found that: 'Threats to our soil, including acidification, erosion and the loss of soil carbon, will increasingly affect Australia's agriculture unless carefully managed.'

³⁵ Land clearing in Queensland increased from 91 690 ha in 2010-11, to 153,640 ha in 2011-12, and to 296,324ha by 2013-14, resulting in significant levels of atmospheric CO₂ emissions. Source: Queensland Government, Statewide Landcover and Trees Study (SLATS) Reports.

new trigger would require federal approval of significant land clearing based on three aspects (scale, habitat and activity). That is: clearing activities over a certain scale; any clearing of nationally-threatened species habitat; and a schedule of other activities (e.g. coastal resorts) with known land-clearing impacts on sensitive areas.

9. Identify and reduce subsidies for polluting activities, and support communities in transition

The Council of Australian Governments should convene an independent review of government subsidies for high-emissions activities – including fossil fuel production, power generation and use. Examples to examine include the fuel tax credits scheme, royalty exemptions, and accelerated depreciation of fossil fuel producing assets. The independent review should be based on OECD subsidy reduction frameworks, and be tasked with recommending how to reduce or phase-out subsidies and tax concessions that create incentives to pollute, or act as a barrier to emissions reduction. Subsidies could be redirected to emissions reduction, environment protection, economic transition and community development.

Identifying and removing subsidies to environmentally harmful activities, including fossil fuel production and consumption, is consistent with various international bodies' recommendations, including the OECD, World Bank, the IEA and the G20.³⁶ There is positive value in redesigning grants, concessions and incentives so that they encourage environmental improvement and discourage (not subsidise) harm.

10. Increase government capacity and resourcing for effective climate change responses

We strongly support the continued role of independent scientific and policy advisory bodies to inform the directions of Australia's climate law and policy. This should include statutory advisory bodies and expanded resourcing under new climate laws.

We are very concerned at the attrition of public sector capacity to deliver climate policy, foreign aid and environmental protection, and the continued threat of further reduced capacity and resourcing. To support and influence systemic changes to meet the challenge of global warming, the Australian Government needs to increase its own institutional capacity, as well as develop effective partnerships with the States and Territories, NGOs and private sector.

Climate change considerations and analysis also need to be fully integrated into mainstream policymaking across all relevant agencies and all levels of government. Government departments need additional climate literacy, particularly departments that set strategic direction, as well as economic advisory and natural resource management (NRM) agencies such as the Treasury, Department of Prime Minister &

³⁶ According to the OECD, subsidies for fossil-fuel production or use in OECD countries alone 'had an overall value of \$55 to \$90 billion a year in 2005-2011'. Furthermore, 'According to the IEA's *World Energy Outlook 2012*, fossil fuel subsidies amounted to \$523 billion in 2011, up almost 30% on 2010 and six times more than subsidies to renewables.' P. Love, 'Fossil fuel subsidies: billions up in smoke?' OECD Insights, at: <http://oecdinsights.org/2013/02/11/fossil-fuel-subsidies-billions-up-in-smoke/>.

Cabinet, the Productivity Commission and departments responsible for infrastructure, agriculture and water.

Finally, Climate-specific agencies such as the Clean Energy Regulator, Clean Energy Finance Corporation, Australian Renewable Energy Authority continue to play important roles. Other area-specific advisory bodies such as the National Water Commission and National Sustainability Council (both now disbanded) also brought important expertise and perspectives on the nexus between climate change, resource management and economic transition that has been lost in recent years.

11. Place robust safeguards on land carbon sector and international carbon units

The Discussion Paper notes the strong uptake of vegetation management under the ERF, whereby farmers, carbon traders and others in the land and agriculture sector can receive credits for emissions abatement. Forests, wetlands and soil carbon play a vital role in the global carbon cycle, and protect most of the world's terrestrial biodiversity. Yet at the same time, the recent erosion of state land-clearing laws has legitimised the broadscale clearing of hundreds of thousands of hectares of mature vegetation in Australia.

These contradictory policies aside, a number of states have recently adopted 'net'-zero emissions targets by 2050. The term 'net' suggests governments will partly rely on carbon offsets to achieve their 2050 targets (although to what extent is unclear). At a minimum, this requires high standards for offsets integrity and transparent and robust accounting rules.

The use of domestic 'land carbon' credits (and potentially international units) to maintain and improve carbon storage in forests, soil, wetlands and other vegetation raises three important policy issues that the climate policy review must consider:

- land-clearing, governance and additionality,³⁷
- robust carbon accounting for the land sector, and
- avoiding perverse incentives and encouraging co-benefits for biodiversity.

We examine each of these in turn. In summary we recommend safeguards that secure additionality, avoid carbon leakage in other parts of the system, and that protect biodiversity and land rights of traditional owners in Australia and overseas – so as to ensure integrity of the ERF and any accredited domestic or international schemes.

Land-clearing, governance and additionality

Confidence in state and federal laws governing the land sector has been shaken in recent years, with knock-on effects to confidence in the Emissions Reduction Fund. Past or present governments in Queensland, NSW and Victoria have weakened protections against broadscale land-clearing. This directly results in cumulative

³⁷ 'Additionality': ensuring emissions avoidance wouldn't have occurred anyway, without the incentive.

impacts to biodiversity and carbon loss. In Queensland, some 300,000 hectares were cleared in two consecutive years when state vegetation laws were weakened.³⁸

It is an inherent contradiction that the ERF is paying over a billion dollars from the federal budget for land reforestation, while at the very same time, state laws permit broadscale clearing to worsen, without penalty and for private gain. Furthermore, the absence of a broadscale 'land-clearing trigger' in the EPBC Act means the federal government has limited powers to intervene.

The ERF or other government climate policies that invest in land carbon projects must not subsidise or create incentives for clearing mature vegetation (an existing carbon stock) for later revegetation, as distinct from truly additional works that increase land carbon sinks. For example, it would be a perverse use of climate policy funding to pay a landholder to revegetate land that has recently been cleared.

The independent Hawke review of the EPBC Act raised this need to safeguard against perverse incentives in relation to federal land carbon programs, calling for:³⁹

...additional protection for non-forest vegetation through the eligibility requirements for reforestation projects ... for example, by not issuing credits for activities that are occurring on land that has been cleared of remnant native vegetation within a specified timeframe.

Clear and separate carbon accounting needed in the land sector

Extensive use of land carbon programs and net-zero targets make it all the more important for Australia to ensure transparent and rigorous carbon accounting methods. This would include estimates of carbon loss from land-clearing of different vegetation and soil types, reporting of carbon loss in annual native vegetation report cards (federal and state), and considering environmental costs in decision-making.

It is often assumed that 'carbon offsets' such as reforestation are a direct swap to compensate for atmospheric fossil-fuel emissions. However, as Professor Brendan Mackey notes: 'Land carbon mitigation activities do not offset fossil fuel emissions. Rather, they result in either avoided emissions or restoration of previously depleted stocks.'⁴⁰ Increasing atmospheric emissions released from deep fossil fuel reserves will take thousands of years for earth systems to re-absorb.

Expressing similar concerns, the Climate Council notes that while land carbon serves important functions, it may result in perverse outcomes if reliance on this method subverts action to reduce atmospheric emissions from burning fossil fuels, including domestic and exported emissions from Australia.⁴¹

³⁸ See for example, Queensland Department of Science, Information Technology and Innovation, *Land cover change in Queensland 2012–13 and 2013–14: a Statewide Landcover and Trees Study (SLATS) report* (2015).

³⁹ Dr A. Hawke et al., *An Australian Environment Act: Report of the Independent Review of the Environment Protection and Biodiversity Conservation Act 1999* (2009), recommendation 11.

⁴⁰ B. Mackey, 'What is the role of forest carbon in greenhouse gas mitigation?' *Pathways to a Sustainable Economy* conference, Griffith University, 28 November 2016. See further Mackey B., Prentice I.C., Steffen W., House J.I., Lindenmayer D., Keith H. and Berry, S. (2013) 'Untangling the confusion around land carbon science and climate change mitigation policy', *Nature Climate Change* 3, 552–557; doi:10.1038/nclimate1804

⁴¹ The Climate Council, *Land Carbon: No substitute for action on fossil fuels* (2016), at www.climatecouncil.org.au.

To avoid the risks of seeing land carbon and atmospheric carbon systems as interchangeable, Mackey argues that ‘Land carbon should have its own mitigation accounting, targets, policies and incentives’, separate to fossil fuel emissions accounting and reduction targets. We support this approach being adopted in Australian climate policy.

Promoting co-benefits for carbon and biodiversity

We also recommend rigorous safeguards on climate funding for land carbon to avoid projects that adversely affect biodiversity, and promote co-benefits for carbon and biodiversity. For example, diverse plantings of local species provide greater co-benefits than monocultural plantations.

Poor policy design could create perverse incentives that risk biodiversity loss. For example, while biofuels may have a net benefit if they avoid carbon emissions, they create a loss if they involve clearing native habitat to plant fuel crops.⁴²

12. Link actions on the Paris Agreement and the Sustainable Development Goals

The Climate Policy Review should consider how to integrate the Government’s pursuit of Paris Agreement commitments with the Sustainable Development Goals.⁴³ The 17 Goals aim to integrate economic development, social equity and environmental protection – so are important to the future of Australian and global energy supply. The following Goals are most relevant:

Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all;

Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation;

Goal 12: Ensure sustainable production and consumption patterns;

Goal 13: Take urgent action to combat climate change and its impacts;

Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and biodiversity loss⁴⁴

As Australia maps out its efforts to meet the Paris Agreement commitments and Sustainable Development Goals, the Government should increase resourcing levels and consider how funding and capacity-building can complement one another in Australia and abroad – particularly in the areas of energy, emissions reduction, ecosystem and biodiversity protection, and sustainable production and consumption patterns.

⁴² The Climate Council, *Land Carbon: No substitute for action on fossil fuels* (2016), Australia, p 26.

⁴³ The SDGs succeed the Millennium Development Goals. See for example:

<https://sustainabledevelopment.un.org/sdg13>.

⁴⁴ ‘Acknowledging that the UN Framework Convention on Climate Change is the primary international intergovernmental forum for negotiating the global response to climate change.’

Attachment A: Summary of state and federal climate mitigation laws and targets (adapted from EDO NSW, *Planning for Climate Change*, 2016)

Jurisdiction	Climate Mitigation Law	Legislative Targets
SA	<i>Climate Change and Greenhouse Emissions Reduction Act 2007</i>	<ul style="list-style-type: none"> • Net zero emissions by 2050 (new target to be legislated). • 60% reduction in emissions by 2050 (1990 baseline). • 50% of electricity generated from renewables by 2025 (policy target).
VIC	<i>Climate Change Act 2017</i> ⁴⁵	<ul style="list-style-type: none"> • Net zero emissions by 2050 (principal target). • Five-year interim targets and Climate Strategies.
ACT	<i>Climate Change and Greenhouse Gas Reduction Act 2010</i>	<ul style="list-style-type: none"> • Net zero emissions by 2050 (principal target). • 40% reduction in emissions by 2020 (1990 baseline). • Peaking per capita emissions by 2013. • 100% of electricity generated from renewables by 2020.
TAS	<i>Climate Change (State Action) Act 2008</i>	<ul style="list-style-type: none"> • 60% reduction in emissions by 2050 (1990 baseline).
CTH	(No legislated emissions reduction target) <i>Renewable Energy (Electricity) Act 2010</i> <i>Carbon Credits (Carbon Farming Initiative) Act 2011</i>	<ul style="list-style-type: none"> • 5% reduction in emissions by 2020 (2000 baseline) (Kyoto Protocol, policy target). • 26-28% reduction in emissions by 2030 (2005 baseline) (Paris Agreement, policy target).⁴⁶ • Revised Renewable Energy Target of 33,000 GWh by 2020.
NSW	No climate mitigation law	<ul style="list-style-type: none"> • No legislated target. • 'Aspirational' goal of net zero emissions by 2050.
NT	No climate mitigation law	<ul style="list-style-type: none"> • No legislated target.
QLD	No climate mitigation law	<ul style="list-style-type: none"> • No legislated target.
WA	No climate mitigation law	<ul style="list-style-type: none"> • No legislated target.

⁴⁵ *Climate Change Act 2017* (Vic) received royal assent on 28 Feb 2017, and replaces the 2010 Act.

⁴⁶ *Note:* The Climate Change Authority (2014) recommended a 30% reduction in emissions by 2025 (2000 baseline), with a further target range of 40-60% reduction by 2030. See *Reducing Australia's Greenhouse Gas Emissions: Targets & Progress Review - Final Report* (2014).