Environmental Defenders Office

Submission to the Net Zero Commission NSW Call for Evidence for Decarbonisation Pathways

August 2026

About EDO

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 40 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.

www.edo.org.au

Submitted to:

Net Zero Commission
By email only: contact@netzerocommission.nsw.gov.au

For further information on this submission, please contact:

Revel Pointon
Managing Lawyer, Policy and Law Reform
T: (02) 9262 6989
E: revel.pointon@edo.org.au

Hilary Neville
Policy and Law Reform
T: (02) 9262 6989
E: hilary.neville@edo.org.au

Acknowledgement of Country

The EDO recognises and pays respect to the First Nations peoples of the lands, seas and rivers of Australia. We pay our respects to the First Nations Elders past and present and aspire to learn from traditional knowledge and customs that exist from and within First Laws so that together, we can protect our environment and First Nations cultural heritage through both First and Western laws. We recognize that First Nations Countries were never ceded and express our remorse for the injustices and inequities that have been and continue to be endured by the First Nations of Australia and the Torres Strait Islands since the beginning of colonisation.

EDO recognises the right to self-determination of First Nations peoples, including their right to freely determine their own political status and freely pursue their economic, social and cultural development. This extends to recognising the many different First Nations within Australia and the Torres Strait Islands, as well as the multitude of languages, cultures, protocols and First Laws.

First Laws are the laws that existed prior to colonisation and continue to exist today within all First Nations. It refers to the learning and transmission of customs, traditions, kinship and heritage. First Laws are a way of living and interacting with Country that balances human needs and environmental needs to ensure the environment and ecosystems that nurture, support, and sustain human life are also nurtured, supported, and sustained. Country is sacred and spiritual, with culture, First Laws, spirituality, social obligations and kinship all stemming from relationships to and with the land.

A note on language

We acknowledge there is a legacy of writing about First Nations peoples without seeking guidance about terminology. We also acknowledge that where possible, specificity is more respectful. For the purpose of this submission, we have chosen to use the term First Nations. We acknowledge that not all First Nations will identify with that term and that they may instead identify using other terms or with their immediate community or language group.

The role of EDO & First Nations Peoples

EDO is a non-Indigenous community legal centre that works on behalf of First Nations peoples around Australia in their efforts to protect their Countries and Cultural Heritage from damage and destruction. EDO has and continues to work with First Nations clients who have interacted with Western laws, including litigation and engaging in Western law reform processes.

Out of respect for First Nations self-determination, EDO's recommendations for Western law reform in relation to First Nations matters are high-level, to support First Nations to protect their Countries and Cultural Heritage as they see fit. In making this submission, EDO cannot and does not speak on behalf of First Nations peoples or groups. The submission is based on our expertise in human rights, planning and environmental Western law and experience in seeking to protect First Nations Cultural Heritage through Western law.

Contents

Executive Summary and Summary of Recommendations

1. Environmental Defenders Office (**EDO**) welcomes the opportunity to comment on the Call for Evidence to inform the development of the first NSW-specific set of decarbonisation pathways.

2. Developing robust, binding decarbonisation pathways is important for guiding all sectors towards effective actions to meet NSW's legislated emissions reduction targets by 2030, 2035 and net zero by 2050.

3. One of the most significant barriers to achieving these targets, however, is the significant and continuing emissions from the resources sector, and the legal frameworks and policy settings that enable this to continue. To realistically achieve these targets, in accordance with the purpose and guiding principles of the *Climate Change (Net Zero Future) Act 2023* (**Net Zero Act**) and Australia's international obligations, EDO recommends that sector-specific decarbonisation pathways for the resources sector provide for the managed decline of the fossil fuel industry, as a matter of priority. This includes no expansions or extensions of coal mines or gas projects in NSW. Alternatively, robust decarbonisation pathways providing for the managed decline of the industry, accounting for direct and indirect emissions, provides a significant opportunity for effective and substantial emissions reduction.

Summary of Recommendations

Our key recommendations are:

Policies and market mechanisms

Recommendation 1: Sector-specific decarbonisation pathways for the resources sector should prioritise and provide for the managed decline of the fossil fuel industry (consisting of annual binding targets) in accordance with NSW legislated emissions reduction targets, the purpose and guiding principles of the Net Zero Act, and in accordance with Australia's international obligations in relation to climate change clarified by the Advisory Opinion of the International Court of Justice (**ICJ**) on the *Obligations of States in Respect of Climate Change* (**ICJ Advisory Opinion**).

Recommendation 2: No expansions of coal mines or gas projects be approved in NSW, as is necessitated by NSW emissions reduction targets, the purpose and guiding principles of the Net Zero Act, best available science, and the public interest, and this should be reflected in the development of any decarbonisation pathway(s), and reflected in relevant industry/sectoral policies.

Recommendation 3: Decarbonisation pathways should set binding annual and/or interim sub-sectoral GHG limits or targets for all current projects and any decisions on applications for expansion or extension of coal mine developments, which ratchet down consistent with NSW targets. Decarbonisation pathways must also consider and plan for affected workforces and communities, consistent with the guiding principles.

Recommendation 4: Amendments should be made to the *Environmental Planning and Assessment Act* (**EP&A Act**) or prescribed in regulations or in a State Environmental Planning Policy to ensure planning decisions are consistent with NSW's emissions reduction targets. Consent authorities should be required to assess the impact of a development's direct emissions on NSW emissions reduction targets in relation to modelled decarbonisation pathways consistent with the targets, purpose and guiding principles of the Net Zero Act.

Recommendation 5: Decarbonisation pathways, planning decisions, emissions data and projections be based on best available science, including:

a. using higher-order methods and source-site verification for fugitive emissions from fossil fuel development, and in particular from open-cut coal mines;

b. using a global warming potential for short lived pollutants such as methane that is commensurate to the timeframe covered by the emissions reduction targets, that is, a 20-year timeframe rather than a 100-year timeframe.

Recommendation 6: Limits must be imposed on methane emissions from fossil fuel projects as air pollution under the *Protection of the Environment Operations Act 1997* (NSW) (**POEO Act**). These limits should be determined based on a sectoral decarbonisation pathway, which should also include binding limits on methane emissions, consistent with the NSW emissions reduction targets.

Recommendation 7: Implement the full suite of recommendations in the EDO's report on *Improving Regulation of Coal Mine Methane in NSW*.

Recommendation 8: Consideration of the impact of scope 3 emissions of a development should be included and assessed in the determination of project applications under the planning framework, in relation to Australia's contribution to the global carbon budget and included in resource-sector-specific, decarbonisation pathways to limit global temperature increase to 1.5C above pre-industrial levels.

Technology and behaviour change

Recommendation 9: While emphasising the importance and necessity of phasing out fossil fuels, including as recommended under Recommendations 1 and 2 above, coal mines must be required to implement best-available techniques/best-available technology, including ventilation air methane abatement, to address methane emissions. The ability to rely on offsets to meet regulatory obligations or emissions reduction targets should be limited to circumstances only where abatement is not yet possible.

Decarbonisation pathways should further encourage, based on best available science, further investment and provide stronger incentives for emissions reduction and abatement technologies to assist in alleviating heavy or over-reliance on offsets, and eventual phase out of offsets used, to meet emissions targets.

Economic impacts and just transition

Recommendation 10: Decarbonisation pathways and opportunities should be co-designed with First Nations communities and their representative organisations, according to Free, Prior and Informed Consent (**FPIC**) principles. Relevant legislative decision-making processes related to decarbonisation pathways should embed FPIC requirements.

Recommendation 11: Decarbonisation pathways and opportunities need to ensure clear provision, opportunities and avenues for effective and meaningful consultation with affected communities, especially rural, regional and remote communities. This should be supported by best practice community engagement and consultation, and consistent with Australia's international and domestic human rights obligations and environmental justice principles.

Recommendation 12: Economic assessments for fossil fuel projects be required to include the costs of the impacts of the project's scope 3 emissions, using a social cost of carbon or damage cost model. Decarbonisation pathways should also adopt such a model.

Introduction

EDO welcomes the opportunity to provide this submission to the Net Zero Commission's (the Commission) Call for Evidence to inform the development of the first NSW-specific set of decarbonisation pathways.

For 40 years, EDO has provided legal advice and representation to communities in NSW on public interest environmental matters, including clients who are concerned about the environmental health, social and economic impacts of the fossil fuel sector in NSW. This submission is informed by this work.

As a general statement, EDO supports the development of robust, evidence-based decarbonisation pathways across all sectors of the NSW economy. Reducing overall emissions, looking to technological solutions including electrification where possible and appropriate, and

developing clear guidance are vital to ensuring better climate outcomes and achievement of NSW's emissions reduction targets, as well as meeting Australia's broader climate obligations.

However, as noted by the Commission's 2026 Annual Progress Report, based on current greenhouse gas emissions (**GHG**) trends, NSW is not on track to, and will not, meet its 2030, 2035 or 2050 legislated targets unless the pace of decarbonisation urgently increases.[1] As the most recent NSW State of the Environment Report noted, climate change is having an impact on all aspects of the NSW environment: "[c]limate change is already affecting NSW communities. Impacts to human health, the environment, water resources, the economy, properties and infrastructure will continue to increase".[2]

The considerable contributions to overall emissions in NSW from the resources sector (in 2022-23, the resources sector contributed 12% of NSW total emissions, 96% of which were from coal mining) continue to pose one of the most pressing and significant risks to the achievement of climate ambitions.[3] EDO is concerned that the pace and level of ambition for change in this area demonstrated by the NSW Government and relevant agencies to date do not reflect the guiding principles of the Net Zero Act and will not achieve the legislated emissions reduction targets by the 2030, 2035 and 2050 deadlines.

The NSW Government has expressed continued commitment to meeting the legislated emissions reduction targets, and supporting actions to facilitate the ratcheting down of emissions across all sectors, including in the *NSW Government Response to Net Zero Commission 2024 Annual Report and the Parliamentary inquiry report by the Joint Standing Committee on Net Zero Future* (**Government Response**), and more recently, the *NSW Coal Industry 2026-50* policy (**NSW Coal Industry Policy**).[4] However, these policy positions and responses do not in our view make specific commitments to address the significant emissions from the resources sector with the urgency required – despite the welcome and necessary prohibition of future greenfield coal development.[5]

---

[1] Net Zero Commission, *2026 Annual Progress Report*, July 2026, available at <https://www.netzerocommission.nsw.gov.au/sites/default/files/2026-07/Net-Zero-2026-Annual-Progress-Report.pdf> (**NZC 2026 Annual Progress Report**), pp 39-40.

[2] NSW Environment Protection Authority (**NSW EPA**), *NSW State of the Environment 2024*, Tabled Report, 'Climate Change', 'Impacts', available at <https://www.epa.nsw.gov.au/sites/default/files/2025-05/NSWSOE2024.pdf>, p 397.

[3] Net Zero Commission, *Coal Mining Emissions: Spotlight Report*, December 2025, available at <https://www.netzerocommission.nsw.gov.au/sites/default/files/2025-12/NZC_Coal_Spotlight_Report_2025.pdf>, (**NZC Spotlight Report**) p 8.

[4] NSW Government, Department of Climate Change, Energy, the Environment and Water, *NSW Government Response to Net Zero Commission 2024 Annual Report and the Parliamentary inquiry report by the Joint Standing Committee on Net Zero Future*, June 2025, available at <https://www.energy.nsw.gov.au/sites/default/files/2025-06/NSW-DCCEEW-response-to-Net-Zero-Commission.pdf> (**Government Response**), p 10; NSW Government, *NSW Coal Industry 2026-50*, March 2026, available at <https://www.nsw.gov.au/sites/default/files/2026-03/nsw-coal-industry-2026-50.pdf> (**NSW Coal Industry Policy**) pp i (Minister's Foreword), 12, 14-15.

[5] Government Response, p 10; NSW Coal Industry Policy pp i (Minister's Foreword), 12, 14-15.

The NSW Government indicated in its Government Response that its new Net Zero Plan will specifically identify transport and the built environment as priority sectors for emissions reductions to meet the 2030 and 2035 targets.[6] Without detracting from the importance of decarbonising these sectors, especially in relation to transport-related air pollution which poses both climate and health-related risks,[7] the fossil fuel sector has not been similarly identified as a priority. Nor has the NSW Government ruled out continued expansion of existing mining operations, despite the significant direct emissions from the sector. This is despite the Commission's concerns that "continued extensions or expansions to coal mining in NSW are not consistent with the emissions reduction targets in the [Net Zero] Act or the Paris Agreement temperature goals it gives effect to" and that "coal mining emissions are set to increase and remain the most material source of resources sector emissions".[8]

It is vital that the resources sector is scrutinised and prioritised in the development of decarbonisation pathways. Not only does the direct emissions of the resources sector jeopardise NSW meeting its emission reduction targets, but the sector's indirect emissions, which are significantly greater than the total direct emissions of the NSW economy,[9] have played a significant historical and continuing role in exacerbating climate change and its impacts on the environment, community, and economy of NSW.

Guided Questions and scope

This submission draws on previous analysis and recommendations prepared by EDO, including:

- Improving Regulation of Coal Mine Methane in NSW;[10]
- Submission on the Net Zero Commission 2025 Consultation;[11]

[6] Government Response, p 10.

[7] For further information on these points, please see EDO, *Roadmap to Reality: Assessing Net Zero Commitments in the Transport Sector*, 2024, available at <https://www.edo.org.au/wp-content/uploads/2024/04/Roadmap_to_Reality_Assessing_Net_Zero_Commitments_in_the_Transport_Sector__1_.pdf >; EDO, *Toxic Transport: How Our Pollution Laws are Failing to Protect Our Health*, 2023, available at <https://www.edo.org.au/wp-content/uploads/2023/11/EDO_TransportPollutionReport_FINAL_2.pdf>.

[8] NZC 2026 Annual Progress Report, pp 5, 11, 78-79.

[9] NZC 2026 Annual Progress Report, p 82, citing Commonwealth Department of Climate Change, Energy, the Environment and Water (**DCCEEW (Cth)**), *State and Territory greenhouse gas inventories: 2023 emissions*, updated 30 May 2025, available at <https://www.dcceew.gov.au/climate-change/publications/national-greenhouse-accounts-2023/state-and-territory-greenhouse-gas-inventories-2023-emissions>.

[10] EDO, *Improving Regulation of Coal Mine Methane in NSW*, May 2025, available at <https://www.edo.org.au/wp-content/uploads/2025/06/250531-EDO-Report-Improving-coal-mine-methane-regulation-in-NSW-1.pdf>.

[11] EDO, *Submission on the Net Zero Commission 2025 Consultation*, 11 July 2025, available at <https://www.edo.org.au/wp-content/uploads/2025/07/250711-EDO-submission-NZC-2025-consultation-with-Attachments-A-and-B.pdf>.

- Submission to the NSW Joint Standing Committee on Net Zero Future Inquiry into emissions from the fossil fuel sector[12]

Given the challenges posed in reducing emissions and phasing out fossil fuels, and the contribution of the sector to overall emissions, the focus of this submission is primarily on the resources/fossil fuel sector, and considerations for the development of rigorous pathways, including as informed by the best available evidence, to ensure consistency with domestic and international legal frameworks. Mindful of the Guided Questions posed by the Commission, EDO has structured this submission to correspond to the first three broad categories/subheadings, namely, policies and market mechanisms; technology and behaviour change; and economic impacts and just transition, highlighting key considerations as to the legal aspects to be taken into account in developing decarbonisation pathways.

Policies and market mechanisms

Aligning policies with the Net Zero Act and international obligations

Net Zero Act and domestic commitments

1. The Net Zero Act sets out the NSW Government's commitment to action on climate change and enshrines emissions reduction targets into NSW law.

2. The statutory purpose of the Act, set out at s 3, is "to give effect to the international commitment established through the 2015 Paris Agreement" to hold the increase in the global average temperature to well below 2°C above pre-industrial levels, pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels, and increase the ability to adapt to the adverse impacts of climate change.[13]

3. It also provides that, in enacting the Act, the Parliament of NSW recognises that "there is a scientific consensus that human activity is causing abnormal changes to the climate" and "action is urgently required to reduce greenhouse gas emissions and to address the adverse impacts of climate change",[14] and is "committed to effective action on climate change to ensure a sustainable and fair future for the people, economy and environment of New South Wales".[15]

4. The Net Zero Act specifies the following emissions reduction targets for NSW:
    - 50% reduction on 2005 emissions by 2030;
    - 70% reduction on 2005 emissions by 2035; and

[12] EDO, *Submission to the NSW Joint Standing Committee on Net Zero Future Inquiry into emissions from the fossil fuel sector*, August 2025, available at <https://www.edo.org.au/wp-content/uploads/2026/04/250829-EDO-submission-Inquiry-into-impact-of-NSW-fossil-fuels-on-net-zero.pdf>.

[13] *Climate Change (Net Zero Future) Act 2023* (NSW) (**Net Zero Act**), available at <https://legislation.nsw.gov.au/view/html/inforce/current/act-2023-048>, s 3(1).

[14] Net Zero Act, s 3(2).

[15] Net Zero Act, s 3(3).

- By 2050, to reduce net GHG emissions in NSW to zero.[16]

5. The Act provides that the Premier and Minister must ensure NSW achieves the legislated 2050 target.[17]

6. The Act, at s 8, sets out guiding principles for action to address climate change (**guiding principles**), which include:
    - That there is a critical need to act to address climate change which is a serious threat to the social, economic and environmental wellbeing of NSW;
    - That action to address climate change should:
        - be taken as early as possible to minimise the cost and adverse impacts of climate change;
        - be taken in a way that: is fiscally responsible; promotes sustainable economic growth; considers the economic risks of delaying action to address climate change; and considers the impact on rural, regional, and remote communities in NSW:
        - be consistent with the right to a clean, healthy and sustainable environment;
        - be consistent with the principles of ecologically sustainable development;[18]
        - take into account the best available science (among other things).[19]

7. The guiding principles also provide that the NSW Government is responsible for "urgently developing and implementing strategies, policies and programs to address climate change" and ensuring it "pursues best practice in addressing climate change".[20]

International obligations applicable to the NSW Government

8. In addition to these domestic obligations, the unanimous ICJ Advisory Opinion delivered on 23 July 2025, and subsequently endorsed on 20 May 2026 by United Nations General Assembly Resolution A/RES/80/263 by 141 votes (including that of Australia), represents an authoritative statement of international law, confirming States have international obligations in relation to climate change under climate treaties such as the Paris Agreement as well as customary international law.

9. The ICJ found that *"States have a duty to prevent significant harm to the environment by acting with due diligence and to use all means at their disposal to prevent activities carried out within their jurisdiction or control from causing significant harm to the climate system and other parts*

[16] Net Zero Act, s 9.

[17] Net Zero Act, ss 9(1)(c), 11.

[18] As described in the *Protection of the Environment Administration Act 1991* (NSW), available at <https://legislation.nsw.gov.au/view/html/inforce/current/act-1991-060#statusinformation>, s 6(2), which provides that "ecologically sustainable development requires the effective integration of social, economic and environmental considerations in decision-making".

[19] Net Zero Act, ss 8(2)-(6), (8).

[20] Net Zero Act, s 8(10).

of the environment, in accordance with their common but differentiated responsibilities and respective capabilities".[21] Given the serious risks currently posed to the climate system by anthropogenic activities, the ICJ found that the standard of due diligence required for preventing significant harm to the climate system is "stringent" and requires a "heightened degree of vigilance and prevention".[22]

10. Further, in determining whether a State has complied with such obligations, the conduct of "any organ of a State must be regarded as an act of that State".[23] This includes the conduct of subnational governments, such as the NSW Government in regulating fossil fuels. The ICJ further articulated that "*[f]ailure of a State to take appropriate action to protect the climate system from GHG emissions – including through fossil fuel production, fossil fuel consumption, the granting of fossil fuel exploration licences or the provision of fossil fuel subsidies – may constitute an internationally wrongful act which is attributable to that State*", emphasising that the wrongful act is not the emission of GHGs but the failure to protect the climate system from significant harm resulting from anthropogenic emissions of GHGs.[24]

11. Setting robust decarbonisation pathways is consistent with these principles and Australia's international obligations and would provide a clear way forward across all sectors of the economy in achieving NSW's interim targets and net zero by 2050. However, NSW cannot meet its emission reduction targets, regardless of decarbonisation pathways, with an expanding fossil fuel resources subsector.

Expansion of operations incompatible with achieving legislative targets and net zero by 2050

12. Any expansion or extension in the fossil fuel subsector presents a key barrier to NSW's achievement of its legislated emissions reduction targets.

13. As the Commission noted in its 2026 Annual Progress Report, with reference to the earlier Coal Mining Emissions Spotlight Report, "continued extensions and expansions to coal mining in NSW are inconsistent with NSW's legislated targets. All emissions associated with these projects make achieving the emissions reduction targets harder".[25] The EDO notes the Commission's reporting that as of 1 June 2026, 20 coal mining expansion and extension projects were in the NSW planning system, and that "2025 projections forecast a 10-20 $MtCO_2$-e economy-wide overshoot in 2030 and a 21-24 $MtCO_2$-e economy-wide overshoot in 2035.[26]

---

[21] International Court of Justice, *Obligations of States in Respect of Climate Change* [2025] ICJ Rep 187, available at <https://www.icj-cij.org/sites/default/files/case-related/187/187-20250723-adv-01-00-en.pdf>, (**ICJ Advisory Opinion**), [457] finding B(a).

[22] ICJ Advisory Opinion, [138].

[23] ICJ Advisory Opinion, [427].

[24] ICJ Advisory Opinion, [427].

[25] NZC 2026 Annual Progress Report, pp 79, 81, referring to the NZC Spotlight Report.

[26] NZC 2026 Annual Progress Report, p 82.

14. In October 2024, the Federal Climate Change Authority released its *Sector Pathways Review 2024* (**CCA Sector Pathways Review 2024**) – a review of the potential technology transition and emissions pathways for six sectors of the economy that best support Australia's transition to net zero emissions by 2050.[27] In noting emissions from the resources sector contributed to 23% of national emissions, the Authority noted the significant contribution to this from "fossil fuel combustion and fugitive emissions from the mining, oil and gas subsectors".[28] Its sectoral pathway for the resources industry set out existing and prospective technologies for decarbonisation of the sector, and was informed by published literature where available, as well as views expressed during stakeholder engagement. Ultimately, however, the Climate Change Authority noted that "[d]eclining domestic production of coal and gas will contribute to a reduction in Australia's emissions," and the sectoral pathway sees "output from the fossil fuels subsector declines steadily to 2050, whereas the non-fossil fuels subsector continues to grow".[29] This necessary decline in emissions will only occur however, if there is meaningful action to wind down the sector, and there are no expansions or extensions approved for fossil fuel projects in NSW.

15. The international context also indicates a broader shift among States towards a clearer pathway to phasing out fossil fuel reliance. Not only is continued expansion incompatible with the Paris Agreement temperature goals, but more recently, in November 2025, the Australian Government endorsed the *Belem Declaration on the Transition Away from Fossil Fuels* (**Belem Declaration**), which calls for a "just, orderly and equitable transition away from fossil fuels".[30] Subsequently, the first Conference on Transition Away from Fossil Fuels held in Santa Marta, Colombia in April 2026, attended by 57 countries including Australia, resulted in the establishment of voluntary workstreams on transition roadmaps, finance systems and improved dialogue between fossil fuel exporters and importers to address fossil-fuel intensive trade.[31] While non-binding and in preliminary stages, there appears to be building momentum,

---

[27] Climate Change Authority, *Sector Pathways Review 2024*, 2024, available at <https://www.climatechangeauthority.gov.au/sites/default/files/documents/2024-09/2024SectorPathwaysReview.pdf>, (**CCA Sector Pathways Review 2024**).

[28] CCA Sector Pathways Review 2024, p 116.

[29] CCA Sector Pathways Review 2024, pp 118-119.

[30] Joint Standing Committee on Net Zero Future, *Report No. 2: Emissions from the fossil fuel sector*, August 2026, available at <https://www.parliament.nsw.gov.au/parliamentary-business/committees/committee-details?committeeId=328> [2.86]; COP30, Belém do Pará, *Belem Declaration on the Transition Away from Fossil Fuels*, November 2025, available at <https://static1.squarespace.com/static/68dc91a7e566d74a91e8e22d/t/6982c9263e67ae51aa01c17d/1770178854739/BELEM+DECLARATION+ON+THE+TRANSITION+AWAY+FROM+FOSSIL+FUELS.pdf> (**Belem Declaration**).

[31] *Co-Host Takeaways on the First Conference on Transitioning Away from Fossil Fuels*, 30 April 2026, available at <https://static1.squarespace.com/static/68dc91a7e566d74a91e8e22d/t/69f2979327f294060a2cb53d/1777506195819/TAFF+Conference_Co-host+Takeaways_DEF.pdf>; Claudio Forner, Neil Grant and Bill Hare, "*Santa Marta opens a new front for fossil fuel phase out*", Climate Analytics, 1 May 2026; Daisy Dunne, "*Santa Marta: Key outcomes from first summit on 'transitioning away' from fossil fuels*", CarbonBrief, 30 April 2026, available at <https://climateanalytics.org/comment/santa-marta-opens-a-new-front-for-fossil-fuel-phase-out>.

which will likely only increase ahead of the next conference to be jointly hosted by Ireland and Tuvalu, in 2027, with anticipated increasing scrutiny on the Pacific region. Given Australia's attendance at the first Conference and public support for the Belem Declaration, development of rigorous decarbonisation pathways providing for the transition away from fossil fuels would be consistent with this international position.

16. Yet even with the anticipated declining output of coal and gas production, the NSW Department of Climate Change, Energy, the Environment and Water's (**DCCEEW**) 2025 GHG emissions projections *NSW greenhouse gas emissions projections 2025: Methods paper* (**NSW GHG Projections 2025: Methods Paper**) confirms that NSW is not on track to meet its emission reduction targets, with projections that the 2030 target will not be reached until 2034, and the 2035 target not reached until 2042.[32] The Methods Paper states "the gap to reaching targets has widened since the 2024 update".[33] According to business as usual assumptions (that accounts for significant factors affecting NSW emissions including previous policies, but excludes the impact of the Net Zero Plan and related Government policies and programs):[34]

> "[F]ugitive emissions are projected to increase from 10.4 Mt CO_2-e in 2024 to 14.2 Mt CO_2-e by 2029, primarily due to increasing coal production in the short term. Emissions are then expected to decline by 9.2 Mt CO_2-e between 2029 and 2042, reaching 5.0 Mt CO_2-e. By 2050 all coal mines are projected to close, bringing emissions from the sector down to 1.9 Mt CO_2-e (from decommissioned mines and the oil and gas subsector)."[35]

17. Expanded or extended coal operations are also unnecessary. This has been clear since 2021, when the International Energy Agency (**IEA**) found that "beyond projects already committed as of 2021, there are no new oil and gas fields approved for development in our pathway, and no new coal mines or mine extensions are required".[36] More recent analysis conducted by Climate Analytics concluded "[f]or both oil and gas, existing capacity is more than sufficient to meet fossil fuel demand during a global [transition away from fossil fuels]".[37]

---

[32] NSW Department of Climate Change, Energy, the Environment and Water (**NSW DCCEEW**), *NSW greenhouse gas emissions projections 2025: Methods paper*, July 2026, available at <https://www.environment.nsw.gov.au/sites/default/files/2026-07/nsw-greenhouse-gas-emissions-projections-2025-260183.pdf>, (**NSW GHG Projections 2025: Methods Paper**), pp 2, 5.

[33] NSW GHG Projections 2025: Methods Paper, pp 2, 5.

[34] NSW Net Zero Emissions Dashboard, updated 22 July 2026, available at <https://www.seed.nsw.gov.au/net-zero-emissions-dashboard>.

[35] NSW greenhouse gas emissions projections 2025: Methods paper, p 63.

[36] International Energy Agency (**IEA**), *Net Zero by 2050 - A Roadmap for the Global Energy Sector*, May 2021, available at <https://iea.blob.core.windows.net/assets/7ebafc81-74ed-412b-9c60-5cc32c8396e4/NetZeroby2050-ARoadmapfortheGlobalEnergySector-SummaryforPolicyMakers_CORR.pdf>, p 11.

[37] Based on their 'Highest Possible Ambition Scenario' see N Grant, O Waterton, D Tsekeris and C Forner, *Highest Possible Ambition: Science-aligned fossil fuel phase-out pathways*, Climate Analytics, Briefing, June 2026, p 4.

18. That is, there is no credible place for an expanding fossil fuel subsector in the resources sector, or in any decarbonisation pathway(s), if NSW is to meet its legislated emissions reduction targets. This is even more apparent when the likely underestimation of fugitive emissions from open-cut coal mines is taken into account, and global warming potential of methane is considered on a timeframe commensurate with the emissions reduction targets. In addition, continued approval of coal mine expansions is inconsistent with the purpose of the Net Zero Act.

NSW Coal Industry 2026-50 Policy

19. The NSW Government's *NSW Coal Industry Policy* sets out the approach of the NSW Government towards coal, and "establishes a pathway for the future of coal mining in NSW, supports our coal mining communities, protects a critical input into Australia's sovereign steelmaking capability and ensures [NSW] continue[s] to honour… export commitments, while reducing emissions".[38] It is an important policy relied on by proponents of coal mines, and government agencies and decision makers as a basis for expansion of coal mines that undermine the ability of NSW to meet its emissions targets.

20. While the Policy confirms that the NSW Government will not consider applications for new 'greenfield' coal mines, it states extension applications for existing operations will be considered "subject to strict project-by-project approval processes and robust regulatory frameworks… [including] rigorous controls to reduce emissions".[39] Extensions of mining operations broadly include extensions in time and area of existing mines, and recommencing mining operations under existing mining leases, including mines that have suspended operations.[40] Exploration applications will also be accepted for areas adjacent to existing exploration and mining licences.[41] It also states that "[a]s mining continues and, in some areas extends, it is critical the industry ensures its emissions decline consistent with NSW legislation and targets. These outcomes will only be achievable through collaboration between the NSW coal industry and the NSW Government."[42]

21. While the NSW Coal Industry Policy also includes commitments to reducing emissions in accordance with NSW's targets, including stringent environmental regulatory requirements and significant investment in abatement technologies, the policy position to allow further expansion and/or extension of mining operations, and relying significantly on emerging technologies complemented by the use of offsets, is not compatible with NSW's broader net zero ambitions and policies.

22. Neither the Net Zero Act nor the EP&A Act explicitly set out how consent authorities should exercise their functions in order to ensure they are promoting the achievement of NSW's

[38] NSW Coal Industry Policy, Minister's foreword, p 7.
[39] NSW Coal Industry Policy, pp 6, 14.
[40] NSW Coal Industry Policy, p 14.
[41] NSW Coal Industry Policy, p 14.
[42] NSW Coal Industry Policy, p 7.

emissions reduction targets, or acting consistently with the guiding principles of the Net Zero Act. As is apparent from the continued operation of, and approvals for extensions to, coal mining activities and the NSW Government's policies in relation to coal mining, including those outlined above, more prescription is necessary to ensure that the climate impacts, and impacts to NSW's legislated emissions reduction targets, of approval decisions are appropriately taken into account and weighted.

23. In particular, amendments should be made to the EP&A Act (or, as a secondary option, prescribed in regulations or in a State Environmental Planning Policy) requiring persons performing functions under the EP&A Act to consider the guiding principles and emissions reduction targets of the Net Zero Act in the performance of those functions.

24. In addition, decision makers should be required to, prior to granting development consent (or modification to a development consent), objectively ensure that the development is consistent with the guiding principles and emissions reduction targets of the Net Zero Act. Regulations to the Net Zero Act could prescribe how consistency with the emissions reduction targets are to be measured. This could, for example, be through an emissions budget approach, which could be aligned to decarbonisation pathways.

25. As set out above, if NSW is to meet its legislated emissions reduction targets, the coal industry must cease production by 2050. The policy of the NSW Government is that sectors reduce their emissions in line with the legislated emissions reduction targets.[43] It is therefore critical that any decarbonisation pathways provide a way forward for the NSW coal industry to comply with these legislative and policy prescriptions and facilitates NSW meeting its emissions reduction targets, consistent with the guiding principles of the Net Zero Act. This could include, for example, setting annual sub-sectoral GHG limits, which ratchet down consistent with NSW targets. Decarbonisation pathways must also consider and plan for affected workforces and communities, consistent with the guiding principles.

Recommendation 1: A specific, sectoral decarbonisation pathway should provide for the managed decline of the coal industry, consistent with NSW achieving its legislated emissions reduction targets for 2030, 2035 and 2050, the purpose and guiding principles of the Net Zero Act, and consistent with Australia's international obligations in relation to climate change clarified by the ICJ Advisory Opinion.

Recommendation 2: No expanded coal mines or gas projects be approved in NSW, as is necessitated by NSW emissions reduction targets, the purpose and guiding principles of the Net Zero Act, best available science, and the public interest, and this should be reflected in the development of any decarbonisation pathway(s) and reflected in relevant industry/sectoral policies.

Recommendation 3: Decarbonisation pathways should set binding annual and/or interim sub-sectoral GHG limits or targets for all current projects and any decisions on applications for

[43] Government Response, p 10.

expansion or extension of coal mine developments, which ratchet down consistent with NSW targets. Decarbonisation pathways must also consider and plan for affected workforces and communities, consistent with the guiding principles.

Recommendation 4: Amendments should be made to the EP&A Act or prescribed in regulations or in a State Environmental Planning Policy to ensure planning decisions are consistent with NSW's emissions reduction targets. Consent authorities should be required to assess the impact of a development's direct emissions on NSW emissions reduction targets in relation to modelled decarbonisation pathways consistent with the targets, purpose and guiding principles of the Net Zero Act.

Addressing methane emissions in decarbonisation pathways

Accounting for methane emissions

26. Methane is a potent GHG and has more than 28 times the global warming potential of carbon dioxide over a 100-year period; when measured over a 20-year period its global warming potential rises to 84-87 times that of CO_2.[44] This contrasts with the persistent problem caused by carbon dioxide, which has an atmospheric lifetime between 300 and 1,000 years. Reducing methane emissions, and incorporating this into decarbonisation pathways, provides an opportunity for significant near-term climate benefits.[45]

27. The emissions reduction targets set out in the Net Zero Act are for 4, 9, and ultimately 24 years from now. It is illogical and inaccurate to use a 100-year global warming potential figure for GHGs, such as methane, with a much higher global warming potential over the period the Net Zero Act covers rather than a figure that accurately represents the impact of those emissions over the relevant period.

28. The CCA Sector Pathways Review 2024 found that reported fugitive emissions from coal mining in Australia are predominantly methane emissions (95%), and that fugitive emissions account for almost half of the resources sector's reported emissions, with 25% from coal mining.[46] As the Commission's 2026 Annual Progress Report notes, in NSW methane emissions have an enormous impact and contribute 30% of NSW's overall emissions, with 30% of these from coal mining (with 91% of coal mining fugitive emissions being methane).[47]

---

[44] IEA, *IEA Methane Tracker 2021*, Methane and Climate Change, 2021, available at <https://www.iea.org/reports/methane-tracker-2021/methane-and-climate-change>.

[45] IEA, *Global Methane Tracker 2026*, 4 May 2026, available at <https://www.iea.org/reports/global-methane-tracker-2026> (**IEA, Global Methane Tracker 2026**) p 14; NSW Environment Protection Authority (**NSW EPA**), *Improving Measurement of Fugitive Methane Emissions*, July 2025, available at <https://www.epa.nsw.gov.au/sites/default/files/2025-07/25p4603-improving-measurement-of-fugitive-methane-emissions.pdf>, (**NSW EPA, Measurement of Fugitive Methane Emissions**), p 7.

[46] CCA Sector Pathways Review 2024, p 117

[47] NZC 2026 Annual Progress Report, pp 11, 77.

29. Emissions data and projections in NSW are based on Australia's National Greenhouse Gas Inventory, which include proponent estimates reported under the National Greenhouse and Energy Reporting Scheme (**NGER Scheme**) under the *National Greenhouse and Energy Reporting Act 2007* (Cth) (**NGER Act**). However, studies have shown that it is likely that actual fugitive methane emissions from coal mines, and in particular from open-cut coal mines, are significantly higher and could be double than those being reported.[48]

30. The NSW Environment Protection Authority (**NSW EPA**) has also noted the significant uncertainties in assessing the magnitude of fugitive emissions, where underground coal mines carry uncertainty around ±10.2% (±26 kilotonnes methane (**kt CH4**)) and surface or open-cut coal mines carry even larger uncertainty of approximately ±33.2% (±22 kt CH4).[49]

31. With reference to the methods prescribed under the NGER Scheme, the NSW EPA noted that even using the highest-tiered method in relation to underground mines (where there is less uncertainty in methane measurement), "there are circumstances in which the application of this method may still lead to emissions estimates with relatively large uncertainties".[50]

32. On this basis, the coal sector likely represents a greater share of NSW emissions than is currently set out in emissions projections, the 2026 Annual Progress Report, and all other policies and analysis relying on these figures.[51] Addressing methane emissions from open-cut coal mines in NSW is therefore an urgent and impactful step for inclusion in any decarbonisation pathway.

33. The Climate Change Authority's 2023 review of the NGER Act also found significant discrepancies from figures reported by coal mines using (permitted) lower-order measurement methods compared with satellite and top-down measurement.[52] The Australian Government has established an expert panel to advise on improving calculation of fugitive

---

[48] A Reynolds and C Yeman, Not Measured, *Not Managed: Australia remains ignorant of its coal mine methane problem*, Ember, 29 November 2023, available at <https://ember-energy.org/app/uploads/2024/10/FInalEmber_Commentary_Not-Measured-Not-Managed.pdf>; P Rayner and A Grant, *Open Methane's First Results Build the Urgent Case for Improved Emissions Measurement*, Open Methane, 30 April 2024, available at <https://openmethane.org/analysis/open-methane-first-result-builds-case-for-improved-measurement>; A Denis-Ryan, *Fugitive methane emissions cast dark cloud over Australia's Net Zero ambitions*, Institute for Energy Economics and Financial Analysis, 2023, available at <https://ieefa.org/articles/fugitive-methane-emissions-cast-dark-cloud-over-australias-net-zero-ambitions>; see also IEA methane tracker 2026 interactive tool, available at <https://www.iea.org/data-and-statistics/data-tools/methane-tracker>, Australian emissions; comparison with other estimates.

[49] NSW EPA, Measurement of Fugitive Methane Emissions, pp 18-19.

[50] NSW EPA, Measurement of Fugitive Methane Emissions, pp 26-27.

[51] Noting the Commission's acknowledgement of this uncertainty, NZC 2026 Annual Progress Report, pp 79-80.

[52] CCA, *2023 Review of the National Greenhouse and Energy Reporting Legislation*, December 2023, available at <https://www.climatechangeauthority.gov.au/sites/default/files/documents/2023-12/2023%20NGER%20Review%20-%20for%20publication.pdf>, p 5.

methane emissions under the NGER Scheme.[53] However, this panel is not due to report until June 2027.

34. Similarly, the NSW EPA, with input from the CSIRO, acknowledged that while methane and other GHGs have traditionally been measured using 'bottom-up' approaches (which encompasses techniques prescribed under the NGER Scheme, including lower-order methods) "which are subject to considerable uncertainty",[54] there is "strong evidence" that relying on 'top-down' emissions monitoring approaches (that is, measuring atmospheric composition) can improve estimation accuracy.[55] As there are advantages and disadvantages to both approaches and varying degrees of accuracy, the NSW EPA and CSIRO ultimately recommended that "[t]he best solution to cover all applications is an integrated methane observing system that combines multiple bottom-up and topdown [sic] methods to harness the advantages of each technique and overcome the limitations of individual methods."[56]

35. It is not tenable for the NSW Government to continue to rely on estimates it is aware are likely to be significantly lower than actual emissions while it waits until nearly 2030 for the expert panel to report. Such underestimates mean that the data the NSW Government seeks to rely on in determining its emission reduction policies, key tools such as the Net Zero dashboard, and decarbonisation pathways to reach NSW's emissions reduction targets, are compromised. It also means that other sectors, including non-coal subsectors of the resources sector, will be required to take on more than their share of emissions reduction. This is particularly problematic for difficult to abate sectors such as agriculture.

36. The EDO recommended in its recent report *Improving Regulation of Coal Mine Methane in NSW* (among other things) that measurement, monitoring, reporting and verification of methane emissions should be undertaken in accordance with best practice to ensure greater accuracy of methane emissions.[57] Relying on inaccurate data jeopardises the effectiveness of any framework or initiative relying on it, (including any decarbonisation pathway) such as the Net Zero Emissions Dashboard. It threatens accurate understanding of any remaining 'carbon budget' and how emissions reduction efforts are tracking. The EDO further recommended the development and imposition of specific methane emissions limits, to be determined by having regard to sub-sectoral decarbonisation pathways consistent with NSW achieving its 2030, 2035 and 2050 emissions reduction targets.[58]

---

[53] DCCEEW (Cth), *Expert Panel on Atmospheric Measurement of Fugitive Methane Emissions in Australia* last updated 13 May 2026, available at <https://www.dcceew.gov.au/climate-change/emissions-reporting/national-greenhouse-energy-reporting-scheme/expert-panel-atmospheric-measurement-fugitive-methane-emissions-au>.

[54] NSW EPA, Measurement of Fugitive Methane Emissions, pp 22, 25-26.

[55] NSW EPA, Measurement of Fugitive Methane Emissions, p 22; see also IEA, *Global Methane Tracker 2026*, p 21, which notes "recent (2025) studies continue to show a clear gap between bottom-up inventories and top-down atmospheric observations, underscoring the need for measurement-informed national reporting."

[56] NSW EPA, Measurement of Fugitive Methane Emissions, p 50.

[57] EDO, *Improving Regulation of Coal Mine Methane in NSW*, pp 41-42.

[58] EDO, *Improving Regulation of Coal Mine Methane in NSW*, pp 9, 41-42.

37. As set out at guiding principle 8(a) of the Net Zero Act, action on climate change should take into account the best available science. Currently, with respect to fugitive emissions from the fossil fuel sector, and in particular from open-cut coal mines, this is not occurring. EDO notes, however, the work of the NSW EPA with input from CSIRO in exploring the development of phased regulatory approaches to reduce fugitive methane emissions released by facilities covered by EPA licences, which indicates a willingness to utilise the best available scientific methods.

38. It is clear from the above that the current approach to quantifying methane emissions, particularly from open-cut coal mines, is not best practice, substantially underestimates those emissions, and thereby distorts the data NSW (and Australia) relies on. A key barrier to meeting emission reduction targets, this reliance risks warping data used to develop sector responsibilities across any decarbonisation pathways, which may ultimately have the effect of shifting the abatement burden onto other industries, such as agriculture and manufacturing, which face rising opportunity costs as they are forced to reduce emissions more steeply to compensate for the fossil fuel sector's underperformance.

Regulating methane emissions

39. Please refer to the EDO's report on *Improving Regulation of Coal Mine Methane in NSW*, for further details on EDO's recommendations for amendments to laws, regulations and policies to improve regulation of, and reductions to, methane emissions.

40. Among EDO's recommendations in that report, is that specific limits should be imposed on methane emissions, including under environment protection licences, and unauthorised releases of methane emissions should be treated as an air pollution offence under the *Protection of the Environment Operations Act 1997* (NSW) (**POEO Act**). Methane emissions fall within the definition of 'air pollution' in the POEO Act, and there is no reason in principle why methane should be treated differently from other air pollutants and a strong public policy argument that it should, given its potency as a GHG.[59]

41. These limits should be determined having regard to a sectoral decarbonisation pathway consistent with NSW achieving its emissions reduction targets.

[59] *Protection of the Environment Operations Act 1997* (NSW), Sch 6, 'air pollution', broadly defined as "the emission into the air of any air impurity".

Recommendation 5: Decarbonisation pathways, planning decisions, emissions data and projections be based on best available science, including:

a. using higher-order methods and source-site verification for fugitive emissions from fossil fuel development, and in particular from open-cut coal mines;

b. using a global warming potential for short lived pollutants such as methane that is commensurate to the timeframe covered by the emissions reduction targets, that is, a 20-year timeframe rather than a 100-year timeframe.

Recommendation 6: Limits must be imposed on methane emissions from fossil fuel projects as air pollution under the POEO Act. These limits should be determined based on a sectoral decarbonisation pathway, which should also include binding limits on methane emissions, consistent with the NSW emissions reduction targets.

Recommendation 7: Implement the full suite of recommendations in the EDO's report *Improving Regulation of Coal Mine Methane in NSW*.

Addressing scope 3 emissions

42. Scope 3 emissions from NSW fossil fuel projects are of particular concern in relation to the broader objectives of meeting global temperature goals under the Paris Agreement and therefore mitigating the effects of climate change. Scope 3 emissions are indirect emissions released outside or beyond a project or a company's operations or control by different entities (or countries) in the value/supply chain.[60] These include those released from the inevitable combustion of NSW-exported coal or gas outside of Australia. These exported scope 3 emissions represent the vast majority (approximately 87%) of GHG emissions from the resources sector – vastly exceeding all Scope 1 and 2 emissions of NSW's entire economy.[61] For example, it is projected that the majority of emissions (98%) generated by the Mount Pleasant Coal Mine Project in the Hunter Valley, NSW, would consist of scope 3 emissions - amounting to 465 $MtCO_2$-e between 2026-27 and 2034-35, "almost 4 times NSW's 2022-23 economy-wide greenhouse gas emissions".[62] Scope 3 emissions from overseas combustion are not captured in NSW's, or the Commonwealth's, GHG accounting frameworks, yet NSW continues to profit from, and support these emissions, with the majority of NSW coal supplies exported to

[60] J Gregory, Aaron Krol, MIT Climate Portal, *Explainer: Scope 1, 2 and 3 Emissions*, 20 March 2024, available at <https://climate.mit.edu/explainers/scope-1-2-and-3-emissions>; Clean Energy Regulator, *Emissions and energy types*, last updated 28 February 2025, available at <https://cer.gov.au/schemes/national-greenhouse-and-energy-reporting-scheme/about-emissions-and-energy-data/emissions-and-energy-types>.

[61] NZC 2026 Annual Progress Report, p 82.

[62] See *Denman Aberdeen Muswellbook Scone Healthy Environment Group Inc v MACH Energy Australia Pty Ltd* [2025] NSWCA 163, [10], [108] (Ward P); NZC 2026 Annual Progress Report pp 82-83, citing data from the DCCEEW (Cth), *State and Territory greenhouse gas inventories: 2023 emissions,* 2025, available at <https://www.dcceew.gov.au/climate-change/publications/national-greenhouse-accounts-2023/state-and-territory-greenhouse-gas-inventories-2023-emissions>.

international markets.[63] In 2025, the coal mining industry reportedly generated $23.4 billion in exports and $2.7 billion in royalties in 2025.[64]

43. Submissions before the current appeal to the High Court in *MACH Energy Australia Pty Ltd ABN 3460845441 v Denman Aberdeen Muswellbrook Scone Healthy Environment Group Inc & Anor* [Case No. S174/2025] (***MACH Energy v Denman***) assert that these scope 3 emissions, regardless of whether they occur in NSW or elsewhere, contribute to global climate change and to impacts of climate change on the people, environment, and economy of NSW.[65] Experts at the UNSW Australian Human Rights Institute have drawn attention to the serious implications posed by Australia's exported emissions in their comprehensive 2024 report, *Escalation: The destructive force of Australia's fossil fuel exports on our climate*.[66] The authors note that *"[m]uch more powerful and direct policy action will be needed for Australia to bring down its fossil fuel production for export to any substantial extent"*. Addressing the impacts, and limiting scope 3 emissions, requires action at a state and federal level. State governments however, in adjusting policy settings, managing planning approvals, among other things, have more regulatory levers for taking effective and immediate action.

44. It is essential that policymakers, administrative decision-makers (such as consent authorities under the EP&A Act), and regulators meaningfully consider the scope 3 emissions of the NSW fossil fuel industry (or, as relevant, the fossil fuel project before them) and the cumulative impacts of such emissions on the remaining global carbon budget for a 1.5C global warming pathway. Scope 3 emissions from NSW coal mine projects are already a consideration for consent authorities under clause 2.20(1) of the *State Environmental Planning Policy (Resources and Energy) 2021* (NSW). However, in practice, consent authorities have rarely engaged meaningfully with the true implications of scope 3 emissions from such projects, generally adopting a position that a project's scope 3 emissions are dealt with by customer countries as Scope 1 emissions under the Paris Agreement and therefore do not need to be regulated in NSW.[67]

---

[63] NSW DCCEEW, *Greenhouse gas emissions accounting and reporting guidelines: Guidelines for NSW Government entities*, June 2025, available at <https://www.energy.nsw.gov.au/sites/default/files/2025-06/20250611-DCCEEW-Greenhouse-Gas-Emissions-Accounting-and-Reporting-Guidelines.pdf>, p 6; A Hellsing, *Australia's greenhouse gas emissions reports: A quick guide*, Parliament of Australia, Department of Parliamentary Services, Research Paper Series 2024-25, 27 November 2024, available at <https://parlinfo.aph.gov.au/parlInfo/download/library/prspub/10056124/upload_binary/10056124.pdf>, p 4; see NSW Coal Industry Policy, p 8.

[64] NSW Coal Industry Policy, p 8.

[65] See, for example, Written Submissions (The Union of Concerned Scientists, seeking leave to be heard as amicus curiae), 19 March 2026, [17]-[21]; Written Submissions (Melbourne Climate Futures, seeking leave to be heard as amicus curiae), 19 March 2026, [37]-[49].

[66] UNSW Australian Human Rights Institute, *Escalation: The destructive force of Australia's fossil fuel exports on our climate*, August 2024, available at <https://issuu.com/humanrightsdefender/docs/2024_escalation_report_v7_/4?ff>.

[67] See, for example, findings of the NSW Independent Planning Commission, referred to in *Denman Aberdeen Muswellbrook Scone Healthy Environment Group Inc v MACH Energy Australia Pty Ltd* [2025] NSWCA 163 at

45. While noting the pending appeal of *MACH Energy v Denman* which considers this issue, such reasoning fails to acknowledge the broader, crucial context to any assessment of scope 3 emissions. As articulated in the ICJ Advisory Opinion, "climate change poses a quintessentially universal risk to all States" and is of a "general and urgent character".[68] Accordingly, the ICJ confirmed States have a "common interest" in the safeguarding of the climate system as all stand to benefit, and, it follows, States' obligations to protect the climate system are obligations *erga omnes*.[69] As above, this obligation consists of exercising stringent "due diligence" in taking regulatory and legislative measures to limit the quantity of emissions (including those caused by private actors under its jurisdiction).[70] As to what this requires for individual states, the ICJ, in recognising the principle of common but differentiated responsibilities and respective capabilities as a core guiding principle in the implementation of the climate change treaties, notes that expected measures from States are not the same.[71] In the ICJ's view, this principle takes into account States' historical and current contributions to cumulative GHG emissions, as well as their current capabilities and national circumstances, including levels of economic and social development.[72] The ICJ further drew a distinction between least developed States and States that have significant resources and technical capabilities to contribute to addressing climate change and implementing wide-ranging emissions reductions.[73]

46. These obligations to take effective action become increasingly more vital, given the world is not on track to meet the temperature targets under the Paris Agreement;[74] the customer countries for the coal exported from NSW coal mines – primarily Japan, China, South Korea, and Taiwan – are not on track to meet their commitments under the Paris Agreement;[75] and the withdrawal of the United States from the Paris Agreement effectively cancels 25% of projected global emission reductions compared with 2030 levels.[76] Further, Australia, like all

---

[22]-[23] (Ward P), where it found that the Project's scope 3 emissions would contribute to anthropogenic climate change and that the cumulative impact of GHG emissions was felt globally, but that those emissions were appropriately regulated by attributing them to the country in which they were emitted.

[68] ICJ Advisory Opinion, [137].

[69] ICJ Advisory Opinion, [440].

[70] ICJ Advisory Opinion, [137]-[138], [427]-[428].

[71] ICJ Advisory Opinion, [148], [179], [226], [290].

[72] ICJ Advisory Opinion, [148].

[73] ICJ Advisory Opinion, [150], [291].

[74] A Olhoff, W Lamb, T Kuramochi, J Rogelj, M den Elzen, J Christensen, T Fransen, M Pathak, and D Tong (eds), *Emissions Gap Report 2025: Off Target - Continued collective inaction puts global temperature goal at risk*, United Nations Environment Program, 2025, available at <https://wedocs.unep.org/rest/api/core/bitstreams/4830e1a8-14c0-44a5-a066-cdd2ba5b3e10/content>, p 2; Kelly Trout et al, "Existing fossil fuel extraction would warm the world beyond 1.5 C" *Environmental Research Letters* 17.6 (2022): 064010.

[75] See analysis at Climate Action Tracker, available at <https://climateactiontracker.org/>.

[76] A Olhoff, W Lamb, T Kuramochi, J Rogelj, M den Elzen, J Christensen, T Fransen, M Pathak, and D Tong (eds), *Emissions Gap Report 2025: Off Target - Continued collective inaction puts global temperature goal at risk*, United Nations Environment Program, 2025, p 22.

States with well-developed industrialised economies, highly evolved systems and structures of governance, and significant human and material resources, is required to "take all the means at its disposal to protect the climate system" to meet its due diligence obligations.[77] The ICJ acknowledges that for such States, these measures must "satisfy a more demanding standard of conduct".[78]

47. The ICJ Advisory Opinion also clarifies that all activities under the jurisdiction and control of States are relevant for consideration regarding whether they are meeting international law obligations in respect of climate change. Those activities include production of fossil fuels, subsidies, and granting licences for fossil fuel exploration.[79] The ICJ confirms that States may attract responsibility under international law for deficiencies in its regulation of emissions caused by private actors at [428]: "*a State may be responsible where, for example, it has failed to exercise due diligence by not taking the necessary regulatory and legislative measures to limit the quantity of emissions caused by private actors under its jurisdiction.*"

48. Specifically in relation to scope 3 emissions considerations, in considering the risks posed by climate change, the ICJ posited that project-level environmental assessments could include "specific climate-related effects", and continued to explicitly suggest this inclusion could be "for the purpose of assessing [activities'] possible downstream effects."[80] Based on this reference to downstream emissions, this includes emissions arising from the consumption of coal that is sold by private actors to overseas buyers.

49. While specific findings of state responsibility attributable to Australia would require confirmation by specialist counsel and the courts, the ICJ Advisory Opinion makes clear that failure to effectively regulate private actors to ensure "deep rapid, and sustained" reductions of GHG emissions necessary to prevent significant harm to the climate system may constitute an internationally wrongful act.[81]

Current NSW Policies on scope 3 emissions

50. There has been some progress in incorporating the measurement, reporting and impact assessment and mitigation of scope 3 emissions across a variety of NSW Government policy documents – though most of these actions remain optional and generally limit consideration to local impacts. For example, the NSW Coal Policy notes that "Scope 1 and Scope 2 emissions

[77] ICJ Advisory Opinion, [291].
[78] ICJ Advisory Opinion, [292].
[79] ICJ Advisory Opinion, [427].
[80] ICJ Advisory Opinion, [298]; see also M Wewerinke-Singh and J E Viñuales, 'Bracing for impact: the ICJ Advisory Opinion on climate change and the activation of legal tipping points', *Journal of Environmental Law* 2026(00), available at (open access) <https://academic.oup.com/jel/advance-article/doi/10.1093/jel/eqag014/8711804>, 5-6, 9.
[81] ICJ Advisory Opinion, [276], [282], [428].

and the local impacts of Scope 3 emissions will continue to be considered" in assessing extension proposals through the planning framework.[82]

51. Recent guidance released by NSW EPA outlines future reporting requirements for certain licensees: those covered by the Commonwealth Safeguard Mechanism, and coal mines that emit more than 25,000 tonnes of CO2-e (scope 1 and 2) per year are required to publish a Climate Change Mitigation and Adaptation Plan (**CCMAP**) by March 2027, with remaining facilities that reach the annual emissions threshold to report by August 2027.[83] A CCMAP may include scope 3 emissions' sources and quantities, in accordance with the Greenhouse Gas Protocol's *Technical Guidance for Calculating Scope 3 Emissions* and the Commonwealth's *National Greenhouse Accounts Factors*, with listed upstream and downstream scope 3 emissions.[84] Licensees may also consider scope 3 emission mitigation measures.[85] Forward estimates of Scope 1 and 2 emissions are required every three years, but estimates including future scope 3 emissions are optional, as are specific scope 3 goals.[86]

52. Similarly, NSW EPA's *Greenhouse Gas Mitigation Guide for NSW Coal Mines* released in March 2026, "strongly encourages mining companies to implement a variety of measures to reduce their scope 3 emissions", and identifies a list of "potential opportunities" for companies to do so.[87] While acknowledging that the "combustion of fossil fuels anywhere in the world impacts the climate system in NSW", the Guide also notes the difficulties and that scope 3 emissions are largely beyond mining companies' control.[88] Given the magnitude and damaging effects of scope 3 emissions, and noting the imperative nature of States' obligations articulated in ICJ Advisory Opinion and canvassed above, such measures lack any mandatory compliance, reporting or abatement measures, and are not commensurate with the urgency and significance of the problem posed by scope 3 emissions.

53. Scope 3 emissions of the NSW resources industry engage, and are incompatible with the purpose and guiding principles (2), (3) and (10)(a) - (b) of the Net Zero Act, especially those that

---

[82] NSW Coal Industry Policy, p 15; Noting that NSW EPA's newly introduced measuring and reporting requirements only refer to Scope 1 and Scope 2 emissions, see NSW EPA, *Climate Change Licensee Requirements*, March 2026, available at <https://www.epa.nsw.gov.au/sites/default/files/2026-03/Climate%20Change%20Licensee%20Requirements.pdf>, (**NSW EPA Climate Change Licensee Requirements**), pp 5-8.

[83] NSW EPA, *Emissions Reporting and Climate Change Mitigation and Adaptation Plans*, March 2026, available at <https://www.epa.nsw.gov.au/sites/default/files/2026-03/Emissions%20reporting%20and%20CCMAP%20guidance.pdf>, (**NSW EPA Emissions Reporting and CCMAPs**) p 9.

[84] NSW EPA Emissions Reporting and CCMAPs, pp 12-13.

[85] NSW EPA Emissions Reporting and CCMAPs, pp 13.

[86] NSW EPA Emissions Reporting and CCMAPs, pp 8, 15-16.

[87] NSW EPA, *Greenhouse Gas Mitigation Guide for NSW Coal Mines*, March 2026, available at < https://www.epa.nsw.gov.au/sites/default/files/2026-03/Greenhouse%20gas%20mitigation%20guide%20for%20NSW%20coal%20mines.pdf> (**NSW EPA, GHG Mitigation Guide for NSW Coal Mines**), pp 30-31.

[88] NSW EPA, GHG Mitigation Guide for NSW Coal Mines, p 30.

relate to giving effect to commitments under the Paris Agreement. This includes the need to prevent the adverse impacts of climate change and pursue efforts to limit global temperature increases, as well as ensuring actions are consistent with the right to a clean, healthy and sustainable environment. Together, these provide sufficient basis to engage with scope 3 emissions and the broader impact on the climate in developing decarbonisation pathways and stronger policy approaches.

54. Other jurisdictions are also considering how to approach scope 3 emissions. In *Finch v Surrey County Council* [2024] UKSC 20, the UK Supreme Court determined that the environmental impacts of the scope 3 emissions from a fossil fuel development must be assessed as part of the development's environmental impact assessment, regardless of where those emissions take place.[89] This is supported by the ICJ Advisory Opinion, which confirmed the requirement as part of the obligation to prevent significant harm to the environment under customary international law, to assess the transboundary climate impacts of activities and their "possible downstream effects" that may have a significant adverse impact on the climate, on the basis of the best available science. [90]

55. The UK government published guidance in 2025 on assessing effects of downstream scope 3 emissions on climate, which provides robust assessment requirements for scope 3 emissions. Importantly, this guidance addresses the deficiencies of an approach (commonly used in Australia) that seeks to downplay the impact of any one project by comparing project emissions to global emissions:

> *[Offshore Petroleum Regulator for Environment and Decommissioning (OPRED)] OPRED's current view is that characterising scope 3 emissions from a project solely in numeric terms against global GHG emissions would not on its own provide a meaningful expression of the global effect of these scope 3 emissions, because of the obvious difference in scale between individual projects and global emissions levels. Therefore, OPRED considers that an assessment of scope 3 emissions in relation to the current state of the climate and global emissions-reduction pathways (IPCC, 2023) is more likely to support a reasoned conclusion on significance.*[91]

56. The guidance further states "it is accepted that GHGs have a global effect on climate. Therefore, when determining the baseline scenario for scope 3 emissions, the location of the emissions is not relevant and a global baseline scenario must be considered".[92] This

[89] *Finch v Surrey County Council* [2024] UKSC 20, [7].

[90] ICJ Advisory Opinion, [296]-[297].

[91] UK Government, Department for Energy Security and Net Zero, *Environmental Impact Assessment (EIA) - Assessing effects of downstream scope 3 emissions on climate*, June 2025, available at <https://assets.publishing.service.gov.uk/media/6853fa3d1203c00468ba2b15/Supplementary_guidance_-_Effects_of_Scope_3_Emissions.pdf> (**UK EIA – Assessing effects of downstream scope 3 emissions**) p 12.

[92] UK EIA – Assessing effects of downstream scope 3 emissions, p 9.

represents a strong model for future policy reform in NSW, including the development of decarbonisation pathways.

Recommendation 8: Decarbonisation pathways should include requirements for assessing, measuring, reporting and reducing scope 3 emissions. In considering the impact of scope 3 emissions of a development on the people, environment, and economy of NSW, any assessment of scope 3 emissions should be undertaken against the remaining global carbon budget to limit global temperature increase to 1.5C above pre-industrial levels. Should accounting for scope 3 emissions not be included in any decarbonisation pathways, this will create an inaccurate measurement of NSW emissions. Implementation of such requirements would further align with the international law position clarified by the ICJ Advisory Opinion.

Technology and behaviour change

Methane Abatement

57. There are proven technologies available to abate fugitive methane emissions from coal mines, including ventilation air methane (**VAM**). The technical feasibility of methane capture and destruction has been demonstrated in both domestic[93] and international projects, with options ranging from flaring and thermal oxidation of VAM to utilisation of captured methane for electricity generation.[94]

58. Certain facilities, namely, environment protection licensees under the *Protection of the Environment Operations Act* 1997 (NSW) that emit 25,000 tonnes or more of CO2-e Scope 1 and 2 emissions (excluding offsets) per year or any of the previous three financial years, will be required to comply with new *Climate Change Licensee Requirements* being introduced by the NSW Government.[95] From early 2027, these changes will be implemented in phases (though no specific timeline for each phase or requirement has been provided).[96] To be prepared with reference to NSW EPA guidance on *Emissions Reporting and Climate Change Mitigation and Adaptation Plans (CCMAP)*, and commencing with annual climate change emissions reporting,

[93] See, for example, CSIRO, *Catalytic VAMMIT trials: tackling methane emissions in mining*, 25 October 2024; NSW Resources, *Fugitive methane emissions from coal mines*, undated.

[94] Climate Change Authority, *Sector Pathways Review 2024*, pp 121-123.

[95] NSW EPA, *Climate change requirements for licensees*, updated 19 March 2026, available at <https://www.epa.nsw.gov.au/Your-environment/Climate-change/climate-change-requirements-licensees>; NSW EPA, *Climate Change Licensee Requirements*, March 2026, available at <https://www.epa.nsw.gov.au/sites/default/files/2026-03/Climate%20Change%20Licensee%20Requirements.pdf>, (**NSW EPA Climate Change Licensee Requirements**), pp 5, 9.

[96] The timing and substantive elements of these requirements will apparently be developed over time in consultation with industry and community. The NSW EPA will also develop mitigation guidance for key sectors, with the aim of including some mitigation actions into regulation or license conditions, see NSW EPA, *Climate change requirements for licensees*, updated 19 March 2026; NSW EPA Climate Change Licensee Requirements, pp 5, 9.

licensees must submit their first reports by 31 March 2027.[97] Requirements will then progress to preparing more comprehensive Climate Change Mitigation and Adaptation Plans (**CCMAPs**), specific mitigation actions, emissions measurement and finally GHG emission limits on licences.[98] Under this change, subject to technological capabilities, monitoring requirements may be imposed for key sources of fugitive methane emissions, including for surface and underground mining.[99] It is envisaged that facility-level measurement requirements will be implemented following collection of data over several years from established regional networks, with emission limits included in licences in the longer term.[100]

59. NSW EPA also engaged CSIRO to review and evaluate methane measurement technologies for fugitive methane emissions.[101] While the EDO welcomes these developments, clarity as to timeframes for implementation and the enforcement and economic incentives compelling operators, including facilities not covered by environment protection licences, should be provided as soon as possible as clear signals to licensees and industry participants, and developed to align with broader decarbonisation pathways.

60. Even while more tailored mitigation actions are developed and required based on consultation and reporting data, there should be 'standard' or minimum requirements for methane mitigation and abatement to be implemented immediately. These conditions should include enforceable methane emissions limits and reviewable emissions reduction targets that are consistent with the NSW emission reduction targets and sectoral decarbonisation pathways.

61. Standard methane abatement conditions should require the implementation of best available techniques/best available technology, including in relation to venting and flaring equipment, VAM abatement, and pre- and post-mining drainage where appropriate. The Commission would be an appropriate body for reviewing international best practice periodically.

62. Under the NSW EPA's climate change reporting requirements, licensees without NGER Scheme reporting obligations are required to estimate their emissions in accordance with NGER legislation, providing there is a suitable methodology. Where no suitable method is available, licensees are required to use either emissions factors in the latest 'National Greenhouse Accounts Factors' or a publicly available methodology, using a 100-year global warming potential for each GHG.[102] Consistent with **Recommendation 5** above, utilising a 20-year global warming potential would more accurately represent the impact of GHG's with higher global warming potential, such as methane, over the period covered by the Net Zero Act.

[97] NSW EPA Climate Change Licensee Requirements, pp 8-11; NSW EPA Emissions Reporting and CCMAPs, p 6.
[98] NSW EPA Climate Change Licensee Requirements, pp 8-11; NSW EPA Emissions Reporting and CCMAPs, p 6.
[99] NSW EPA Climate Change Licensee Requirements, pp 11-12
[100] NSW EPA, *Climate Change Licensee Requirements*, March 2026, pp 12, 14.
[101] NSW EPA, Climate Change Licensee Requirements, p 12.
[102] NSW EPA, Emissions Reporting and CCMAPs, p 7.

63. The IEA and United Nations have emphasised that rapid methane reduction is one of the most cost-effective and impactful ways to slow global warming in the near term.[103] Many of the abatement measures for coal mine methane are classified as low-cost or even no-cost, where the cost of abatement is on par with the cost of offsets. The IEA asserts that "more than 35 Mt could be avoided at no net cost, based on the average energy prices in 2025" with the capital required and operating costs of abatement being lower than the market value of gas captured and sold or used.[104]

64. Concerningly, the NSW EPA's *Greenhouse Gas Mitigation Guide for NSW Coal Mines* released in March 2026 acknowledges that the requirements in the Guide are not sufficient to reduce methane emissions to meet 2030 and 2035 emissions reduction targets.[105] Including, for example, the trial of a VAM regenerative thermal oxidiser plant on a ventilation shaft in the Appin Coal Mine is expected to abate approximately 36,000 tCO2-e per year, amounting to approximately 4% of the emissions from that shaft.[106] It is anticipated that construction will take 12 months, with results from the trial becoming available in 2027-2028.[107] Other VAM mitigation measures are apparently "unlikely to be practical without many more years of research."[108]

65. Further, including as noted in the NSW Coal Industry Policy, "not every mine site is suited to [ventilation air methane abatement technologies] and large-scale deployment in NSW will depend on resolving safety challenges."[109] While the NSW Government has invested in the rollout of this technology in Illawarra, the Policy notes that offsets "will continue to play a complementary role where onsite abatement is not feasible."[110]

66. The IEA considers there are cost-effective abatement options already available, including leak detection and repair; pump and other methane-emitting equipment replacement with electric alternatives; use of vapour-recovery units to capture vented gas; and using associated gas for power generation.[111] Regulatory action to limit flaring and venting, requiring leak detection and repair, and introducing technology standards "do not require a fully established baseline or inventory".[112]

67. While developments to mitigate fugitive methane emissions are welcome, the timeframes for the measures outlined in the Mitigation Guide are too far into the future and do not reflect the scientific reality that the majority of emissions reductions must take place this decade in order

[103] IEA, *Global Methane Tracker 2026*, 4 May 2026, p 14.
[104] IEA, *Global Methane Tracker 2026*, 4 May 2026, pp 8-9.
[105] NSW EPA, GHG Mitigation Guide for NSW Coal Mines, p v.
[106] NSW EPA GHG Mitigation Guide for NSW Coal Mines, p 11.
[107] NSW EPA, GHG Mitigation Guide for NSW Coal Mines, pp 11-12.
[108] NSW EPA, GHG Mitigation Guide for NSW Coal Mines, p 12.
[109] NSW Coal Industry Policy, p 13.
[110] NSW Coal Industry Policy, p 13.
[111] IEA, *Global Methane Tracker 2026*, p 9.
[112] IEA, *Global Methane Tracker 2026*, p 10.

to avoid the worst effects of climate change. Current timeframes fall substantially short of the timeframes set out in the NSW EPA's *Climate Change Action Plan*,[113] and do not reflect the requirements of the guiding principles of the Net Zero Act:

- there is a critical need to address climate change, which is a serious threat to the social, economic and environmental wellbeing of NSW;
- that action to address climate change should be taken as early as possible to minimise the costs and adverse impacts of climate change; and
- that the NSW Government is responsible for urgently developing and implementing strategies, policies and programs to address climate change, and ensuring the NSW Government pursues best practice in addressing climate change.

Offsets

68. The NSW Coal Policy states "the coal industry must continue to play its part in reducing onsite emissions consistent with NSW's legislated interim emissions reduction and net zero targets."[114] The Australian Government's Safeguard Mechanism applies to 26 coal mines in NSW. To meet net emissions under an allocated baseline, the Policy provides that mines may use a combination of abatement and offsets to meet their Safeguard Mechanism obligations.[115] It further confirms that the NSW Government will recognise the contribution of NSW-based offsets in emissions reporting.[116]

69. However, a recent report by The Australia Institute, relying on studies conducted for the Australian Government and Climate Change Authority, found "the majority of compliance obligations under the Safeguard Mechanism over the period to 2030 could be met using [Australian carbon credit units (ACCUs)], meaning less than half of emission reductions required under the Mechanism are expected to come from on-site emission abatement and facility decarbonisation."[117] Broad trends across facilities covered by the Safeguard Mechanism indicate that as baselines are reduced, facilities exceeded emissions caps and "dramatically increased their use of offsets" with "over 7 million ACCUs and 1.4 million SMCs were surrendered in lieu of real decarbonisation."[118]

---

[113] NSW EPA, *Climate Change Action Plan 2023-26*, 2023, available at <https://www.epa.nsw.gov.au/sites/default/files/23p4265-climate-change-action-plan-2023-26.pdf >, pp 32, 52.

[114] NSW Coal Industry Policy, pp 7, 15.

[115] NSW Coal Industry Policy, pp 13, 15.

[116] NSW Coal Industry Policy, p 16.

[117] Fergus Green and Frances Medlock, *Safeguarding the Fossil Fuel Industry? How Carbon Offsetting Undermines the Safeguard Mechanism*, The Australia Institute, June 2026, available at <https://australiainstitute.org.au/wp-content/uploads/2026/06/P2030-Safeguarding-the-Fossil-Fuel-Industry.pdf>, p 25.

[118] Green and Medlock, *Safeguarding the Fossil Fuel Industry?*, p 25, with reference to data from the Clean Energy Regulator, *2023-24 safeguard data insights*.

70. In 2024-25, with further baseline reductions, "141 of the 208 covered Safeguard facilities exceeded their baselines and excess emissions increased by nearly half (48.8%) from the previous financial year, in turn driving a further increase in offset use: 2.6 million [Safeguard Mechanism Credits (SMCs)] and 10.8 million ACCUs were surrendered."[119] Analysis of metals and mining sector companies covered by the Safeguard Mechanism conducted by academics at Monash University further identified (among other broad trends) that compliance was "overwhelmingly driven by carbon credits rather than on-site emissions reductions."[120]

71. This level of reliance on offsets will not deliver real emissions reductions or decarbonise the resources industry while facilities and operators can freely use offsets instead of investing in abatement technologies. Allowing coal and gas production to use offsets does not reflect the reality that fossil fuels need to be phased out, in contrast to other, more essential industries, which can and must be decarbonised. Such a policy does not send a clear price signal in favour of decarbonisation. Government policies at state and federal levels should differentiate between industries which have a place in the future economy and which need to be decarbonised, and the fossil fuel production sector, which needs to be phased out.

72. For completeness, similar comments and precautions apply to the use of and reliance on carbon capture [utilisation] and storage (**CC[U]S**), which have a history of underperformance, and face waning international support.[121] Decarbonisation pathways should emphasise the importance of making emissions reductions directly to activities that have significant GHG emissions, and only permit reliance on technical solutions (including CCUS) for CO_2 (and other GHGs) removal, where such solutions are supported by best available science, and where abatement is not yet possible.

Recommendation 9: While emphasising the importance and necessity of phasing out fossil fuels, including as recommended under **Recommendations 1 and 2** above, coal mines must be required to implement best-available techniques/best-available technology, including ventilation air methane abatement, to address methane emissions. The ability to rely on offsets to meet regulatory obligations or emissions reduction targets should be limited to circumstances only where abatement is not yet possible.

[119] Green and Medlock, *Safeguarding the Fossil Fuel Industry?*, p 25, with reference to data from the Clean Energy Regulator, *2023-24 safeguard data insights*.

[120] Ella Vines, Anke Leroux, and Anita Foerster, *Can Australia's Safeguard Mechanism deliver the emissions cuts it promises?*, Monash University 'Lens', 23 July 2026, available at <https://lens.monash.edu/can-australias-safeguard-mechanism-deliver-the-emissions-cuts-it-promises/>.

[121] See EDO, *Factsheet: Evaluating Offshore Carbon Capture and Storage (CCS)*, updated 26 June 2026, available at <https://www.edo.org.au/wp-content/uploads/2026/06/260626_Evaluating-offshore-CCS-factsheet.pdf>; G Hauber, *Minimal role for carbon capture, utilization, and storage (CCUS) in IEA's World Energy Outlook 2025*, Institute for Energy Economics and Financial Analysis (IEEFA), 22 January 2026, available at <https://ieefa.org/resources/minimal-role-carbon-capture-utilization-and-storage-ccus-ieas-world-energy-outlook-2025>.

Decarbonisation pathways should further encourage, based on best available science, further investment and provide stronger incentives for emissions reduction and abatement technologies to assist in alleviating heavy or over-reliance on offsets, and eventual phase out of offsets used, to meet emissions targets.

Economic impacts and just transition

Effective and meaningful engagement with First Nations according to FPIC principles

73. In the design and implementation of NSW's decarbonisation pathways, the Commission must effectively engage with First Nations people and their representative organisations.

74. A just transition requires the implementation of the *United Nations Declaration on the Rights of Indigenous Peoples* (**UNDRIP**) and Free, Prior and Informed Consent (**FPIC**) in all levels and decision points regarding the energy transition and decarbonisation more broadly. UNDRIP mandates that States engage in genuine consultation and cooperation with First Nations peoples and their representative organisations to secure their FPIC. FPIC reflects the inherent collective right of First Nations peoples to participate in decision-making processes on issues and laws that affect their lives, lands, waters, skies and resources, and to grant or withhold consent where decisions affect them.[122] FPIC must be obtained before enacting any laws or policies that may impact First Nations peoples, and in particular, before undertaking any activities or processes on their lands and waters.

75. The ICJ Advisory Opinion explained the interaction and overlap between international climate and human rights obligations, stating States must "*take their obligations under international human rights law into account when implementing their obligations under the climate change treaties and other relevant environmental treaties and under customary international law, just as they must take their obligations under the climate change treaties and other relevant environmental treaties and under customary international law into account when implementing their human rights obligations*".[123]

76. The ICJ emphasised that Indigenous peoples may be more severely affected by the impacts of climate change, concluding that the enjoyment of human rights by such groups is at risk of being affected by the adverse effects of climate change.[124] The ICJ further opined that "States have obligations under international human rights law to respect and ensure the effective enjoyment of human rights by taking necessary measures to protect the climate system and other parts of the environment".[125]

[122] United Nations Declaration on the Rights of Indigenous Peoples (**UNDRIP**), Arts 3, 10, 18-19, 25-26 and 32.
[123] ICJ Advisory Opinion, [404].
[124] ICJ Advisory Opinion, [382], [384].
[125] ICJ Advisory Opinion, [457E].

77. Australia and NSW's response to the ICJ's Advisory Opinion, including the necessary transition from fossil fuels as required by international law, as well as processes to mitigate and adapt to climate change, must be co-designed with First Nations peoples, informed by First Nations traditional scientific knowledge and grounded in FPIC principles. Further, the protection of First Nations Country and Cultural Heritage should be considered in the planning, approval and execution of all developments.

78. First Nations self-determination, participation and governance should be centred in the design of decarbonisation pathways, for example, in relation to planning for renewable energy zones that disproportionately impact communities with higher populations of First Nations people, and in rehabilitation of decommissioned fossil-fuel mines to seek to best restore Country.

79. As an example as to how a just transition for First Nations can be achieved across all sectors, EDO supports the First Nations Clean Energy Network's *Aboriginal and Torres Strait Islander Best Practice Principles for Clean Energy Projects*.[126] A just transition involves integrating Indigenous ecological knowledge into project design to strengthen protection of Country and Cultural Heritage, alongside respect for Indigenous Cultural and Intellectual Property.

80. First Nations should share in the benefits of the energy transition and decarbonisation across all sectors, including through access to clean energy in remote areas and addressing energy insecurity. However, there may be barriers to this participation, including, for example, lack of funding and resources for First Nations representative organisations and entities to be able to fully participate in decarbonisation and transition, as they see fit.

Recommendation 10: Decarbonisation pathways and opportunities should be co-designed with affected First Nations communities and their representative organisations, according to FPIC principles. Relevant legislative decision-making processes related to decarbonisation pathways should embed FPIC requirements.

[126] First Nations Clean Energy Network, *Aboriginal and Torres Strait Islander Best Practice Principles for Clean Energy Projects*, November 2022, available at <https://assets.nationbuilder.com/fncen/pages/183/attachments/original/1680570396/FNCEN_-_Best_Practice_Principles_for_Clean_Energy_Projects.pdf?1680570396>; see also L O'Neill, B Riley, J Hunt and G Maynard, *Clean Energy Agreement Making on First Nations Land: What Do Strong Agreements Contain?*, 2021, Centre for Aboriginal Economic Policy Research, Australian National University, available at <https://d3n8a8pro7vhmx.cloudfront.net/originalpower/pages/96/attachments/original/1637114200/Clean_Energy_Company_Guide.pdf?1637114200>; DCCEEW (Cth), *First Nations Clean Energy Strategy*, 6 December 2024, available at <https://www.energy.gov.au/energy-and-climate-change-ministerial-council/working-groups/community-engagement-working-group/first-nations-engagement-sub-working-group/first-nations-clean-energy-strategy>.

Effective and meaningful consultation and engagement with local communities

81. All decisions and activities relating to the design and implementation of decarbonisation pathways must be consistent with and consider Australia's international and domestic human rights obligations, and in particular the substantive and procedural elements of the right to a healthy environment, and environmental justice principles. Particular attention should be given to the rights and needs of overburdened people and rural, regional and remote communities.

82. Proposals for decarbonisation pathways should be supported by best practice community engagement and consultation. There are significant benefits of early and open engagement with communities about project siting (if applicable), design, impacts and benefits. This can reduce conflicts, delays and costs. The Commission and relevant NSW Government agencies responsible for developing and implementing decarbonisation pathways, and assessing/approving individual projects and developments, should ensure best practice community consultation is undertaken in seeking local community's social licence to operate. This includes early iterative, culturally appropriate consultation. This community consultation should complement principles relating to ensuring FPIC of First Nations.

83. Further, while non-binding, the Belem Declaration recognised that an orderly, just and equitable transition away from fossil fuels can consider (among other things) "the need to support workers and vulnerable communities, in countries dependent on fossil fuel industries, through reskilling, economic diversification, and social protection measures, and that such actions should promote sustainable development, respect Indigenous Peoples' rights, innovation, and resilient societies."[127]

Recommendation 11: Decarbonisation pathways and opportunities need to ensure clear provision, opportunities and avenues for effective and meaningful consultation with affected communities, especially rural, regional and remote communities. This should be supported by best practice community engagement and consultation, and consistent with Australia's international and domestic human rights obligations and environmental justice principles.

Economic costs associated with GHG emissions, including indirect costs and climate change impacts

84. Economic assessments for fossil fuel projects currently significantly underestimate the economic costs associated with those projects (and overstate the benefits). In part, this is because of the substantial underestimation of emissions from projects, through both inappropriate methodologies and inappropriate global warming potential timescales (as discussed above). Where emissions are underestimated, so too is the impact (and cost) of the development.

[127] Belem Declaration, p 2.

85. Applicants are generally required by the Secretary's Environmental Assessment Requirements issued for a project to undertake an assessment of the likely economic impacts of the development in accordance with the 2015 *Guidelines for the economic assessment of mining and coal seam gas proposals*.[128] The Guidelines are supported by the 2018 *Technical Notes supporting the Guidelines for the Economic Assessment of Mining and Coal Seam Gas Proposals*.[129] These Guidelines are, in the context of legislative and policy developments, scientific and economic understandings of climate change, as well as the relative impacts of additional GHG emissions on atmospheric levels, woefully out of date and must be updated to address the changed context.

86. Most importantly, economic assessments are not required to address the economic costs of the vast majority of emissions from these projects (discussed above), their scope 3 emissions.[130]

87. The economic costs of GHG emissions to NSW, as with other impacts, are not only imposed by the direct emissions from a development, but also from the indirect emissions. As recognised by the Commission in its recent publication *The Economic Impacts of Climate Change in NSW*, climate change driven by GHG emissions is already imposing severe and escalating financial burdens across sectors and communities in NSW.[131] Insurance premiums are rising steeply, with some areas becoming effectively uninsurable due to repeated floods, fires, and extreme weather events.[132] Infrastructure is being damaged or destroyed, agricultural productivity is being disrupted by droughts and floods.[133] The economic costs imposed on society by GHG emissions through their contribution to climate change have been referred to as the social

[128] See, for example, the Secretary's Environmental Assessment Requirements for the Maules Creek Coal Continuation Project, 21 November 2023, available at <https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=SSD-63428218%2120231120T232012.142%20GMT> p 6 [11]; NSW Department of Planning and Environment, *Guidelines for the economic assessment of mining and coal seam gas proposals*, December 2015, available at <https://shared-drupal-s3fs.s3.ap-southeast-2.amazonaws.com/master-test/fapub_pdf/NSW+Planning+Portal+Exhibitions/guidelines-for-the-economic-assessment-of-mining-and-coal-seam-gas-proposals.pdf>.

[129] NSW Department of Planning and Environment, *Technical Notes supporting the Guidelines for the Economic Assessment of Mining and Coal Seam Gas Proposals*, April 2018, available at <https://shared-drupal-s3fs.s3.ap-southeast-2.amazonaws.com/master-test/fapub_pdf/NSW+Planning+Portal+Exhibitions/technical-notes-supporting-guidelines-economic-assessment-mining-coal-seam-gas-proposals.pdf>.

[130] NSW Department of Planning and Environment, *Technical Notes supporting the Guidelines for the Economic Assessment of Mining and Coal Seam Gas Proposals*, April 2018, pp 44-45.

[131] Net Zero Commission, *The economic impacts of climate change in NSW: Understanding past impacts and future economic risks*, June 2026, available at <https://www.netzerocommission.nsw.gov.au/sites/default/files/2026-06/NZC-The-economic-impacts-of-climate-change-in-NSW.pdf>.

[132] Australian Climate Service, *Australia's National Climate Risk Assessment*, 2025, available at <https://www.acs.gov.au/pages/national-climate-risk-assessment>, pp 43, 45, 65, 68, 97.

[133] *Australia's National Climate Risk Assessment 2025*, pp 18-19.

cost of carbon or damage costs.[134] Currently, because of the exclusion of scope 3 emissions for economic assessments (see above recommendations in relation to scope 3 emissions), the full costs of a project are not currently required by the NSW Government to be integrated into economic assessments.

88. Other jurisdictions, in Australia and abroad, have, at different points in time, explored and adopted social cost of carbon models or variations on this economic model, including in the United States, Canada, Europe, and more locally, in the ACT.[135] Under the ACT model, the social cost of carbon is considered in all climate change adaptation outcomes across all policy and budget, procurement and capital works decisions, where funds are then reinvested in emission reduction measures (rather than used to purchase offsets).[136]

89. The real costs of emissions impacts must be incorporated into the economic assessment considered by decision makers, and into decarbonisation pathways, in accordance with the polluters pays principle.

Recommendation 12: Economic assessments for fossil fuel projects be required to include the costs of the impacts of the project's scope 3 emissions, using a social cost of carbon or damage cost approach. Decarbonisation pathways should also adopt such a model.

Thank you for the opportunity to make this submission.
Please do not hesitate to contact our office should you have further enquiries.

[134] K Rennert and C Kingdon, updates by B Prest, *Social Cost of Carbon 101*, Resources for the Future, 1 August 2019 (updated 13 March 2025), available at <https://www.rff.org/publications/explainers/social-cost-carbon-101/>.

[135] See ACT Climate Change Council, *The Social Cost of Carbon and Implications for the ACT*, 21 May 2021, available at <https://www.climatechoices.act.gov.au/__data/assets/pdf_file/0004/1864894/the-social-cost-of-carbon-and-implications-for-the-act.pdf>, pp 10-12; see also ACT Government, Statement: Shane Rattenbury, MLA, *Considering the 'social cost of carbon'*, 16 October 2021, available at <https://www.cmtedd.act.gov.au/open_government/inform/act_government_media_releases/rattenbury/2021/considering-the-social-cost-of-carbon>.

[136] ACT Government, Department of the Environment, *ACT Climate Change Strategy 2019-25*, 2019, available at <https://www.environment.act.gov.au/__data/assets/pdf_file/0003/1414641/ACT-Climate-Change-Strategy-2019-2025.pdf>, p 4.