2025 consultation

Submission type	Upload
Submitter	Environmental Defenders Office
Response ID	E14

Disclaimer

Environmental Defenders Office

Submission on the Net Zero Commission 2025 Consultation

11 July 2025

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

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

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

www.edo.org.au

Submitted to:

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

For further information on this submission, please contact:

Rana Koroglu
Managing Lawyer
T: 1800 626 239
E: rana.koroglu@edo.org.au

Rachael Chick
Senior Solicitor
T: 1800 626 239
E: rachael.chick@edo.org.au

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

Introduction

EDO welcomes the establishment of the Net Zero Commission (**Commission**) and its important role in ensuring that the NSW Government acts consistently with the guiding principles of the *Climate Change (Net Zero Future) Act 2022* (**Net Zero Act**) so as to meet the emissions reduction targets set out in that Act.

Projections released in the past month have borne out and quantified the finding of Commission's 2024 Annual Report that NSW will not meet its 2030, 2035, or 2050 targets without faster and more significant action.

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."[1]

EDO is concerned that the pace of and level of ambition for change in this area demonstrated by the NSW Government and relevant agencies to date, especially with respect to highly polluting industries such as the coal sector, do not reflect the guiding principles of the Net Zero Act and will not achieve the legislated emissions reduction targets. The recently released *NSW Government Response to Net Zero Commission 2024 Annual Report and the Parliamentary inquiry report by the Joint Standing Committee on Net Zero Future*[2] (**Government Response**), although expressing significant commitment to addressing the problem, does not in our view make specific commitments to do so, in particular with respect to the coal sector of the resources industry.

In particular, EDO shares the Commission's concerns about "the risks to the state's targets from increased emissions in the resources sector".

There is a critical, legislated, role for the Commission in providing independent expert advice to the NSW Government to ensure its legislated emissions reduction targets can be achieved.

This submission builds on EDO's submission to the Inquiry into the Commission's 2024 Annual Report (which is **Attachment A** to this submission), and should be read in conjunction with that submission.

As with that submission, this submission primarily addresses the challenge posed to the State's emissions reduction targets posed by the coal mining sub-sector, and is informed by EDO's work using the law to support communities in NSW in relation to its environmental, including climate, impacts.

We would be happy to provide feedback on other issues if requested.

---

[1] NSW EPA, NSW State of the Environment 2024 'Climate Change', 'Impacts', https://www.soe.epa.nsw.gov.au/all-themes/climate/climate-change#impacts-overview

[2] NSW Government Response to Net Zero Commission 2024 Annual Report and the Parliamentary inquiry report by the Joint Standing Committee on Net Zero Future

Summary of recommendations

Our key recommendations to the Commission, having regard to the Government Response, are:

1. As an immediate priority, provide advice and recommendations in relation to the revision of the *Strategic Statement on Coal Exploration and Mining in NSW* (**Strategic Statement on Coal**).

2. Provide a further report on the resources sector, per Recommendation 2 of the report of the Joint Standing Committee on Net Zero Future (**Committee**), which has been accepted by the NSW Government.

3. Provide advice and recommendations to the consent authorities for significant new or expanded coal projects in NSW, with the HVO Continuation Project and Maules Creek Continuation Projects being immediate priorities.

4. Engage continuously with and provide robust advice to the NSW Government on its new Net Zero Plan.

5. Immediately provide advice and recommendations to the EPA in relation to a proposed greenhouse gas mitigation guide for the coal sector.

6. Provide frank, independent advice to the EPA to ensure all policies and plans relating to the regulation of GHG emissions give effect to the guiding principles of the Net Zero Act and, when implemented, will ensure that the emissions reduction targets are met.

NSW will not achieve its emissions reduction goals without a significant shift from business as usual

On 26 June 2025, the NSW Government released its latest GHG emissions projections. It found that on current policy settings, NSW will not meet any of its legislated emissions reduction targets, with projected emissions reductions of 46% (rather than the 50% target) below 2005 levels by 2030 and 62% (in contrast to the 70% target) by 2035.

Its modelling forecasts that, on current policy settings, the abatement gap to reaching the 2030 target is 7.2 Mt CO2-e, while the abatement gap to achieving the 2035 target is 12.6 Mt CO2-e. In 2050, there are 18.0 Mt CO2-e of residual emissions projected.[3]

This is likely to be an underestimate. With respect to emissions from open cut coal mines, fugitive methane emissions are likely to be twice as high as the estimates currently factored into NSW's emissions inventory and thus its emissions projections.[4]

[3] NSW greenhouse gas emissions projections 2024, p 14.

[4] Climate Change Authority, *2023 Review of the National Greenhouse and Energy Reporting Legislation* (2023), pp 5-6, 65-84, 117. See also: International Energy Agency, *Global Methane Tracker 2022 Methane and Climate Change*,; Institute for Energy Economics and Financial Analysis, *Fugitive methane emissions cast dark cloud over Australia's Net Zero ambitions* (5 July 2023); P Rayner and A Grant, *Open Methane's First Results Build the Urgent Case for Improved Emissions Measurement*, Open Methane, 30 April 2024.

The NSW Government, in its June 2025 *Response to the Net Zero Commission 2024 Annual Report and the Parliamentary Joint Standing Committee on Net Zero Future's Inquiry* (**Government Response**), stated that "[t]he NSW Government recognises the urgent need to address climate change and is committed to accelerating action to meet the emissions reduction targets set in the Climate Change Act."[5] We encourage the Commission to provide advice and recommendations with the necessary ambition to ensure its 2030, 2035 and 2050 emissions reduction targets are met, and that the NSW Government acts in accordance with the Guiding Principles.

In particular, we consider that the Commission has a significant role to play in advising decision makers and policy makers on specific decisions and policies that lock in highly emitting projects and industries with little scope for (genuine and on-site) abatement.

Of immediate relevance are the revision of the Strategic Statement on Coal and a number of applications for new, expanded, or otherwise modified coal mine development consents in the planning system currently, both of which are discussed below at pages 9-13.

Powers and functions of the Commission

The Commission has broad advisory functions that empower it to be a robust and independent advisor to the NSW Government on action to address climate change.

The Minister's introduction to the Government Response emphasised that the role of the Commissions is "to give frank, independent advice on the steps needed to meet our [emissions reduction] targets".[6]

The Commission has unique statutory functions that enable it to provide advice **on its own initiative**, without waiting for requests for advice from the NSW Government. The Commission may provide advice **directly** to the Secretary of a Department and the Independent Planning Commission, with notification to the responsible Minister,[7] and may also provide advice to the Minister for Climate Change on its own initiative.[8] The Commission has therefore been set up to be a proactive advisory body, supported by strong statutory powers to request access to information relevant to its functions from government agencies.[9]

The Commission's functions are largely contained in sections 15 to 17 of the *Climate Change (Net Zero Future) Act 2023* (NSW) (**Net Zero Act**). We emphasise in particular the Commission's functions to advise on:

- action that should be taken by the NSW Government to address climate change, including strategies, policies and programs that should be implemented by the NSW Government;[10]

[5]NSW Government Response, p 7.
[6] NSW Government Response, p 4.
[7] Net Zero Act, s 15(3).
[8] Net Zero Act, s 19(3).
[9] Net Zero Act, s 18.
[10] Net Zero Act, s 15(1)(d).

- how to give effect to the guiding principles in the Net Zero Act, [11] noting that the first two principles acknowledge the "critical need" to address climate change and that such action "should be taken as early as possible"; [12]
- ways to reduce net greenhouse gas (**GHG**) emissions in NSW; [13]
- emissions budgets for NSW; [14] and
- GHG emissions and action to address climate change relating to specific business or industry sectors. [15]

The Commission has the opportunity to exercise these functions at a particularly critical time, as a sizeable number of coal expansion projects progress through the NSW planning assessment system, of which 4 out of the 22 projects referred to in the Commission's Annual Report have been approved in the past two months.

Regulations

The Net Zero Act provides broad scope for regulations to be made with respect to any matter that is necessary or convenient for carrying out or giving effect to the Act.[16] It also prescribes a number of specific matters in relation to which regulations can be made, including:

- with respect to targets,[17] including:
    - implementing primary and interim targets;[18]
    - mandating that regulations be made to prescribe an interim target for 2040 and 2045;[19]
    - other matters relating to primary targets and interim targets, including imposing functions on the Commission in relation to the targets;[20]
- calculating and assessing greenhouse gas emissions;[21] and
- adaptation objectives. [22]

[11] Net Zero Act, s 15(2)(a).
[12] Net Zero Act, s 8(2) and (3).
[13] Net Zero Act, s 15(2)(c).
[14] Net Zero Act, s 15(2)(e).
[15] Net Zero Act, s 15(2)(g).
[16] Net Zero Act, s 27.
[17] Net Zero Act, s 9.
[18] Net Zero Act, s 9(5)(a)
[19] Net Zero Act, s 9(3) and (4)
[20] Net Zero Act, s 9(5)(c)
[21] Net Zero Act, s 9(5)(d).
[22] Net Zero Act, s 10(2).

The Government Response anticipates that adaptation regulations will be consulted on before the end of 2026.[23]

In our view, in order to ensure that there is truly a whole-of-government response to climate change, amendments should be made to other legislation and instruments to ensure that the climate impacts, and impacts on the State's legislated emissions reduction targets, of decisions are appropriately taken into account and weighted. In particular, amendments should be made to the *Environmental Planning and Assessment Act 1979* (NSW) (**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. 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. It is critically important to ensure that as a mandatory precondition, development must not be approved under the EP&A Act that will compromise the achievement of NSW's Net Zero targets. Currently, such development continues to be approved.

Similar amendments should be made to the State's pollution legislation, the *Protection of the Environment Operations Act 1997* (NSW) (**POEO Act**).

Regulations to the Net Zero Act could prescribe how consistency with the emissions reductions targets are to be measured. This could, for example, be through an emissions budget approach (which should also include a specific methane budget), such as under the United Kingdom's *Climate Change Act 2008.*

Methane emissions should be prioritised for emissions reductions

Methane is a potent GHG and has more than 28 times the warming potential of carbon dioxide over a 100-year period, when measured over a 20-year period its global warming potential rises to 84 times that of CO_2, and on an instantaneous basis its global warming potential is 120 times higher than CO_2.[22] This contrasts with the persistent problem caused by carbon dioxide, which has an atmospheric lifetime between 300 to 1,000 years.

Methane is responsible for around 30% of the rise in global temperatures since the industrial revolution.[23] The concentration of methane in the atmosphere is increasing at a rate faster than in any period since record-keeping began.[24]

Given its short atmospheric lifetime, acting now to rapidly reduce methane emissions will result in rapid reduction of warming, making the reduction of methane emissions one of the best ways of limiting warming in this and future decades.[25] The United Nations Environmental Program's 2021 Global Methane Assessment found that "mitigation of methane is very likely the strategy with the greatest potential to decrease warming over the next 20 years."[26] This view is supported by the

[23] NSW Government Response, p 4.

International Energy Agency which has stated that rapid and sustained reductions in methane emissions is critical to limiting near-term warming.[27]

If currently available technologies were used to cut global methane emissions by 50% by the end of this decade, the rate of warming being experienced now could be slowed by 30%.[28]

In 2022, Australia recognised the significant contribution of methane to climate change and became a signatory to the Global Methane Pledge, which committed to cut global methane emissions by 30% by 2030.[29]

Methane is a significant contributor to Australia's GHG emissions, contributing approximately 29% of total reported emissions in Australia,[30] with fugitive emissions accounting for 10.9% of Australia's national inventory.[31] In trend terms, reported fugitive emissions increased 0.6% in trend terms over the September 2024 quarter, driven by an increase in NSW coal production.[32]

The Federal Climate Change Authority's Sector Pathway Review 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.[33]

In NSW, 72.7% of the resources sector's direct GHG emissions are fugitive emissions from coal mining. [24]

In 2022, fugitive emissions from underground coal mines were estimated at 8.1 Mt CO2-e, while open cut coal mining contributed a reported 2 Mt CO2-e.[25] However, these figures are likely to significantly underestimate fugitive emissions from open cut coal mining.[26]

This data is based on Australia's National Greenhouse Gas Inventory, which includes 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 emissions are significantly higher and could be double those being reported.[27] That is, the coal sector likely represents a greater share of NSW emissions than is currently set out in emissions projections, the 2024 Annual Report, and all other policies and analysis relying on these figures. Addressing methane emissions from open cut coal mines in NSW is therefore more urgent and impactful even than set out in the 2024 Annual Report.

---

[24] NZC Annual Report 2024, p 47.
[25] NZC Annual Report 2024, p 47.
[26] Climate Change Authority, *2023 Review of the National Greenhouse and Energy Reporting Legislation*, December 2023.
[27] A. Reynolds and C. Yeman, *Not Measured, Not Managed: Australia remains ignorant of its coal mine methane problem*, Ember, 2023; P. Rayner and A. Grant, *Open Methane's First Results Build the Urgent Case for Improved Emissions Measurement*, Open Methane, 2024; A. Denis-Ryan, *Fugitive methane emissions cast dark cloud over Australia's Net Zero ambitions*, Institute for Energy Economics and Financial Analysis, 2023); see also IEA methane tracker 2025 interactive tool, Australian emissions; comparison with other estimates, available at https://www.iea.org/data-and-statistics/data-tools/methane-tracker.

Resource sector

Erroneous data for methane emissions from open cut coal mines must be rectified as soon as possible

As referred to in the Consultation Paper, the Australian government has established an expert panel to advise on improving fugitive methane emissions measurements under the NGER Scheme. However, we note that the expert panel is not due to report until June 2027. It is not tenable for NSW 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 NSW seeks to rely on in determining its emission reduction policies, key tools such as the Net Zero dashboard, and NSW's emission 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.

The Commission should provide general and publicly available advice to the NSW Government that sets out the likely methane emissions from open cut coal mines, based on best available evidence, to ensure NSW does not rely on the unreliable and discredited figures currently reported under the NGER Scheme. Any specific advice or recommendations provided by the Commission that includes or relates to coal mine methane emissions must be based this best available evidence (rather on NGER Scheme figures). This reflects the guiding principle that action to address climate change should take into account the best available science.[28] The NSW Government, including decision makers and policy makers, should be required to use these figures in preference to NGER Scheme figures. Advice on determining more accurate estimations of methane emissions for coal mines is contemplated by and could be formalised as a regulation under s 9(5)(d) of the Net Zero Act, for example.

The Strategic Statement on Coal

The Government Response stated that a revised **Strategic Statement on Coal** is currently being developed by the NSW Government. This is a key policy relied on by proponents of coal mines, and by government agencies and decision makers, as a reason to approve new coal mine expansions that undermine the ability of NSW to meet its emissions reduction targets.

Given the impact of the policy and the way in which it is used, it is critical that the Commission provide advice and recommendations as to the appropriate content of the policy in order for NSW to meet its emissions reduction targets and act consistently with the guiding principles of the Net Zero Act.

EDO expects that the NSW Government is in close consultation with the Commission on the revision of the Strategic Statement on Coal, given the position of the Government, enshrined in the Net Zero Act, that reducing emissions is a whole-of-Government objective.

[28] Net Zero Act, s 8(8)(b).

However, if this is not the case and the Commission has not been involved in the revision of the Statement, this must be rectified immediately.

The Commission's advice and recommendations should be made publicly available.

Recommendation: As an immediate priority, provide advice and recommendations in relation to the revision of the Strategic Statement on Coal

Specific advice on the resources sector, and in particular the coal mining sub-sector

The NSW Government, in the Government Response has accepted Recommendation 2 of the Joint Standing Committee on Net Zero Future's report on the inquiry into the Commission's 2024 Annual Report:[4]

> *That the government supports the commission to use their legislated functions to provide a further report on the resources sector, including methane abatement technology and fugitive emissions, as a matter of urgency*.

We recommend that the Commission's report include advice as to:

- what the NSW Government's new policy position should be in relation to (1) approving further expansions to coal mines, and (2) bringing forward the decommissioning of fossil fuel projects, as is required by the scientific reality of climate change in light of the global carbon budget;
- the risks that the pipeline of coal mine expansion projects in the NSW planning assessment system, and those recently approved, pose to meeting NSW's emissions reductions targets;
- how relevant government agencies should approach the assessment and approval of exploration and mining for coal moving forward, particularly in this intervening period before new NSW Government policies on climate change and the resources sector take effect; and
- the key updates to government policies required in order to bring them in line with the net zero targets and guiding principles under the Net Zero Act. As above, one such policy is the 2020 *Strategic Statement on Coal Exploration and Mining in NSW*.[3]

This report should be provided as a matter of urgency.

The Commission must have a role in decisions on applications for new or modified coal mines

As presently drafted, the Net Zero Act does not provide direct guidance to consent authorities as to how they should exercise their functions in order to ensure they are promoting the achievement of NSW's net zero targets. In time, this regulatory gap should be filled with legislative amendments, the Net Zero Regulations, or government policies.

However, in the meantime, there remains a concerning policy vacuum which the Commission must fill in order to ensure that upcoming decisions as to future coal mine expansions are made to further the achievement of the emissions reduction targets, rather than 'locking in' or exacerbating the overshoot of the 2030 and 2035 emissions targets currently predicted.

We recommend that the Commission exercise its functions under s 15(3) of the Net Zero Act to provide advice to the Secretary of the Department of Planning and the NSW Independent Planning Commission on applications for significant coal mine expansions. Such advice should ensure that:

- the projects' implications for NSW's emissions reduction targets are scrutinised and assessed in light of current predicted overshoot of the 2030 and 2035 targets;
- those implications are afforded substantial weight in the consent authority's assessment of the project, commensurate with the legislative status of the emissions reductions targets; and
- given the magnitude of these emissions, the consent authority engages meaningfully with the assessment of scope 3 emissions and the impacts of such emissions on the remaining global carbon budget for a 1.5C global warming pathway.

Scope 3 emissions

In relation to scope 3 emissions, we note that the purpose of the Commission's constituting instrument, the Net Zero Act, is:[29]

> *to give effect to the international commitment established through the 2015 Paris Agreement to—*
>
> > *(a) hold the increase in the global average temperature to well below 2°C above pre-industrial levels, and*
> >
> > *(b) pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels, and*
> >
> > *(c) increase the ability to adapt to the adverse impacts of climate change.*

Further, the guiding principles for action to address climate change enable the Commission to engage with scope 3 emissions. Relevant principles include:

- that such action be consistent with the right to a clean, healthy and sustainable environment (a foundation of which is a safe climate) and the principles of ecologically sustainable development; [30]

[29] Net Zero Act, s 3(1).
[30] Net Zero Act, s 8(5) and (6).

- that climate action take into account the best available science[31] (which has stated that the global carbon budget is already exceeded by existing and under-construction fossil fuel projects);[32] and

- that there is a need to reduce the risk that climate change poses to human health and survival of all species, and equity and social justice impacts on socially disadvantaged groups and economically vulnerable regions.[33]

Scope 3 emissions from NSW coal mine projects are already mandatory consideration for consent authorities under clause 2.20(1) of the *State Environmental Planning Policy (Resources and Energy) 2021.* However, in practice, consent authorities have rarely engaged meaningfully with the true implications of the scope 3 emissions from such projects, stating 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. Such reasoning fails to acknowledge the below facts, which provide crucial context to any assessment of scope 3 emissions:

- he best available science suggests that the global carbon budget for a 50% chance of staying on a 1.5 degree warming pathway is already exceeded by existing and under-construction fossil fuel projects.[34]

- The world is not on track to meet the temperature targets set under the Paris Agreement.

- 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.[35]

- The recent withdrawal of the United States from the Paris Agreement has been modelled to eliminate more than a third (37%) of the world's emissions reduction.[36]

The UK government has recently published new guidance, Environmental Impact Assessment (EIA) – Assessing effects of downstream scope 3 emissions on climate, which provides robust assessment requirements for scope 3 emissions. This represents a strong model for both future policy reform in NSW and for the Commission and NSW agencies to follow.[37]

---

[31] Net Zero Act, s 8(b).
[32] Trout, Kelly, et al. "Existing fossil fuel extraction would warm the world beyond 1.5 C." *Environmental Research Letters* 17.6 (2022): 064010. Existing fossil fuel extraction would warm the world beyond 1.5 °C - IOPscience
[33] Net Zero Act, s 8(8)(h), (i) and (j), respectively.
[34] Trout, Kelly, et al. "Existing fossil fuel extraction would warm the world beyond 1.5 C." *Environmental Research Letters* 17.6 (2022): 064010. Existing fossil fuel extraction would warm the world beyond 1.5 °C - IOPscience
[35] See analysis on Home | Climate Action Tracker.
[36] Larch, Mario, and Joschka Wanner. "The consequences of non-participation in the Paris Agreement." *European Economic Review* 163 (2024): 104699; The consequences of non-participation in the Paris Agreement - ScienceDirect.
[37] UK Government, Department for Energy Security and Net Zero, Environmental Impact Assessment (EIA) – Assessing effects of downstream scope 3 emissions on climate (June 2025).

Projects of concern

We draw the Commission's attention in particular to the following projects which would benefit from the Commission's immediate intervention, in light of their progressed stage of assessment and/or expected emissions footprint:

- HVO North (SSD-11826681) and HVO South Continuation Projects (SSD-11826621) (scope 1 and 2 emissions unknown; 809.1Mt total emissions estimated) – currently in the process of being amended following advice from the Independent Expert Advisory Panel on Mining in relation to fugitive emissions. We understand that the Amendment Reports are expected to be published in **September 2025**.
- Maules Creek Continuation Project (SSD-63428218) (5.7Mt CO2e scope 1 emissions, 0.077Mt CO2e scope 2 emissions; 427.48Mt total CO2e) – Environmental Impact Statement currently on public exhibition until **4 August 2025**. Research by energy think tank Ember suggests that fugitive methane from the Maules Creek coal mine could be significantly underreported.[38] This means that this project has the potential to have far greater impacts on the achievement of NSW's net zero targets than currently estimated.
- Moolarben OC3 Extension Project (SSD-33083358) (0.49Mt CO2e scope 1 emissions, 0.053Mt CO2e scope 2 emissions; 64.60Mt total CO2e) – We understand the project will likely be referred to the Independent Planning Commission in **late July or early August 2025.**

Recommendation: Provide advice and recommendations to the decision-maker on significant applications for new or expanded coal projects in NSW.

New Net Zero Plan

The NSW Government in its June 2025 Government Response reiterated its commitment to action on climate change, stating that it "recognises the urgent need to address climate change and is committed to accelerating action to meet the emissions reduction targets set in the [Net Zero] Act."[39]

The Government committed to developing a "new, ambitious" Net Zero Plan "to get the state back on track to achieve its legislated 2030 and 2035 emissions reduction targets", and for the Minister for Climate Change to ask the Commission to advise on developing the new Net Zero Plan, including advice on the resources sector. [40]

[38] Risky Millions: Whitehaven's methane potential | Ember; Company-led Emission Conceal Millions of tonnes of CO2-e - June 20, 2024.
[39] NSW Government Response, p 7.
[40] NSW Government Response, p 34.

We encourage the Commission to proactively advise the Government as it develops the plan to ensure the plan creates strong foundation and policy signal for future action on climate change.

The Government states that the new Net Zero Plan will identify transport and built environment as priority sectors for emissions reductions to meet the 2030 and 2035 targets.[41] We urge the Commission to ensure that its concerns with respect to the significant pipeline of coal mine applications in the planning process are addressed in the Net Zero Plan, and to ensure figures for coal mine methane represent best available science. We would be pleased to provide further analysis with respect to any proposals for a new Net Zero Plan.

Recommendation: Engage continuously and provide robust advice to the NSW Government on the development of its new Net Zero Plan.

EPA climate pollution policies

The Government Response confirmed its position that the EPA remains the State's primary regulator of GHG emissions. Conditions of recent approvals for coal mine expansions have also deferred the mitigation of greenhouse gas emissions to post-approval measures under the remit of the EPA, for example the development of greenhouse gas mitigation plans in consultation with the EPA.[42] In these circumstances, the EPA plays a critical role in ensuring emissions from such projects can be mitigated post-approval.

EDO is concerned that the EPA is not acting with the necessary urgency or ambition to secure meaningful emissions reductions from the NSW coal mining sector. For instance, licence reviews of almost all NSW coal mines were conducted over 2024-2025, and none of those licences were varied to put in place limits or controls on methane emissions, or even conditions requiring monitoring and reporting on methane emissions, despite the statutory ability to do so.

The EPA is currently in the process of developing a greenhouse gas mitigation guide for the NSW coal mining sector.[7] This policy document and related EPA policies will have a direct bearing on mitigating emissions from the sector. Failure to adequately ensure emissions from this sector are avoided or mitigated will result in other sectors, such as necessary agriculture and transport, to take stronger measures.

The Government Response states, with respect to the coal mine GHG mitigation guide, that the Commission "will be asked for feedback **as part of the public consultation process** to help reduce duplication and meet the intent of the inquiry's recommendation" (emphasis added).[43] We would be extremely concerned if this means that the EPA has not already consulted with the Commission during its development of the mitigation guide for the coal mining sector, given the functions and obligations of both the EPA and the Commission with respect to climate change and

[41] NSW Government Response, p 10.
[42] See development consents for 4 recent approvals for Mt Arthur Mod 2 (condition 24C), Tahmoor Mod 3 (condition B18A), HVO North Mod 8 (condition 6A), and Ulan Mod 6 (condition 22A).
[43] NSW Government Response, p 34.

the critical importance of reducing GHG emissions from coal mines to addressing climate change and the State's emission reduction targets.

We recommend that the Commission contact the EPA immediately to provide advice and recommendations on a proposed greenhouse gas mitigation guide for the coal sector **before** that guide is placed on public exhibition.

The EPA must ensure that it consults closely with, and seeks and incorporates advice from, the Commission with respect to all policies and plans relating to the regulation of GHG emissions. This should be formalised, for example through regulation, as soon as possible.

The Commission must provide "frank, independent advice" to the EPA on ensuring these policies give effect to the guiding principles of the Net Zero Act and, when implemented, will ensure that the emissions reduction targets are met. This, as the Minister reiterated in the Government Response is the role of the Commission.[44]

The EPA should implement the Commission's advice and recommendations. Given the NSW Government's position that the EPA is the State's primary regulator of GHG emissions, its policies must ensure the emissions reduction targets are met.

Recommendations:

Immediately provide advice and recommendations to the EPA in relation to a proposed greenhouse gas mitigation guide for the coal sector.

Provide frank, independent advice to the EPA to ensure all policies and plans relating to the regulation of GHG emissions give effect to the guiding principles of the Net Zero Act and, when implemented, will ensure that the emissions reduction targets are met.

The Safeguard Mechanism will not achieve NSW's emissions reduction targets

The Safeguard Mechanism is not intended to be a standalone policy for emissions reductions

The Consultation Paper states that the "Australian Government's Safeguard Mechanism is the primary tool to reduce emissions in the resources and industry sectors". We do not agree with this characterisation. The Safeguard Mechanism is one of a number of Commonwealth measures aimed at reducing emissions in those sectors, and is applicable only to direct emissions from facilities emitting over a certain (high) threshold annually. It is described in its enabling legislation, the *National Greenhouse and Energy Reporting Act 2007* (**NGER Act**), as "a mechanism to ensure

[44] As the Minister reiterates in the Government Response is the role of the Commission: NSW Government Response, p 4.

that net covered emissions of greenhouse gases from the operation of a designated large facility do not exceed the baseline applicable to the facility."[45]

The Safeguard Mechanism is not designed to be the sole mechanism by which emissions reductions in the resource and industry sectors in Australia are to occur. This is explicitly set out in the NGER Act, which provides that "[t]he safeguard provisions and the safeguard rules are not intended to exclude or limit the operation of a law of a State or Territory that is capable of operating concurrently with the safeguard provisions and those rules."[46] Its baselines are floors, not ceilings.[47]

The Safeguard Mechanism will not achieve actual emissions reductions at NSW coal mines

In fact, the Commonwealth Safeguard Mechanism as currently designed does little to reduce actual, onsite, emissions from coal mines, including coal mine methane emissions. This is particularly the case for open-cut coal mines.

The Safeguard Mechanism requires that net GHG emissions of each "designated" facility do not exceed its set baseline of emissions. The facilities captured by this scheme emit over 100, 000t CO2-e per annum and their baselines must reduce 4.9% per annum unless they are a Trade Exposed Baseline Adjusted facility, which are facilities facing "elevated risk of carbon leakage." These facilities can apply for a discounted baseline decline rate at no less than 2%. A facility can meet their baseline targets by actual onsite emissions reduction, or purchase and surrender of Australian Carbon Credit Units (**ACCUs**) or Safeguard Mechanism Credits (in-scheme credits) (**SMCs**).

Existing facilities are transitioning to a government-approved industry average emissions intensity value (industry average values) to set their baselines. The consequence of calculating baselines against the average of the very high emitters and lower emitters in the coal mining sector is that the latter will automatically receive SMCs from the scheme in recognition of "emissions reductions" that have not actually occurred, and the former will be able to achieve their "emissions reductions" by the purchase of those SMCs.

Currently, the coal mining sector's industry average values are from both open cut and underground coal mines, where most open cut coal mines report significantly fewer methane emissions per tonne of coal than underground mines (noting however the now well established issue of underreporting of emissions from open cut coal mines). In the short term, reported emissions from open cut coal mines will immediately fall below the industry average and therefore generate SMCs, which can be purchased by underground coal mines with above-industry average emissions to offset their emissions. Once the transfer is complete, no real emissions reduction has occurred. The problem is exacerbated because there are limited abatement options for open cut coal mines once mining has commenced. The range of emissions intensities in the coal mining

[45] *National Greenhouse and Energy Reporting Act 2007* (Cth) (**NGER Act**), s 22XD.
[46] NGER Act, s 22XO(1).
[47] House of Representatives, *Climate Change Bill 2022*, Explanatory Memorandum, p 2.

sector is so broad that this averaging may continue to cancel out even the effect of the annual decline rate out to 2030, effectively relieving the coal sector from the requirement to undertake any direct abatement under the safeguard mechanism.

The mitigation hierarchy must be an underpinning consideration

Application of the mitigation hierarchy will be an essential element of a pathway to Net Zero. This is apparent from the EPA NSW Guide to Large Emitters, which specifies that proponents of large emitting projects must genuinely apply the mitigation hierarchy, and demonstrate how they have done so.[48]

Achieving onsite abatement must be mandated

With respect to question 16 of the Commission's consultation paper, in our view, in order for onsite abatement to be prioritised over offsetting it must be required by law. For example, through conditions placed on development consents under the EP&A Act, on Environment Protection Licences under the POEO Act, or regulations made under the POEO Act. Without this, offsets are a much more attractive proposition than onsite abatement because of their ease of use and the opportunity costs of prioritising abatement measures, even where the cost of abatement is on par or lower than the price per tonne of offsets.[49]

This is a real concern where there is evidence, as is the case for SMCs in the coal sector, that the offsets in question are low quality or generated through shifts in methodology, rather than through genuinely additional abatement.[50]

EDO's May 2025 Report *Improving coal mine methane regulation in NSW* examines the current regulation of coal mine methane emissions in NSW and makes a number of recommendations for improvement. A summary of this report is at **Attachment B**.

Offsets must be a very last resort and must be generated in NSW

Offsets should only be available in exceptional circumstances, where avoidance, reduction and substitution are not available. Given the overreliance on offsets, the circumstances in which offsets are permissible should be prescribed by regulation.

Offsets that are derived from emission abatement outside NSW cannot properly be considered in relation to the NSW emissions reduction targets, which are specified at s 9(1) of the Net Zero Act as (emphasis added) "**net** greenhouse gas emissions **in New South Wales**". Reductions in GHGs achieved outside NSW simply do not fall within this legislative prescription and cannot be considered for the purposes of the achievement of the NSW emissions reduction targets.

---

[48] See the mitigation hierarchy at Figure 1 of the EPA NSW Guide for Large Emitters, pp 13-14.
[49] See, for example, Common Capital, May 2025, *Unlocking cost-effective methane abatement in the NSW and QLD coal industry*, https://commoncapital.com.au/publication/unlocking-cost-effective-methane-abatement-in-the-nsw-and-qld-coal-industry/.
[50] See, for example, Ember, June 2024, *How an accounting shift could conceal millions of tonnes of coal mine emissions*, https://ember-energy.org/app/uploads/2024/06/Report-Self-led-estimates-conceal-millions-of-tonnes-of-CO2-e-June-20-2024-1.pdf.

Other resources

We commend the following EDO resources to the Commission should they be of assistance to its work:

- Improving coal methane regulation in NSW - Environmental Defenders Office (May 2025)
- Submission to the Inquiry into the 2024 Annual Report of the Net Zero Commission (14 February 2025)
- Submission to Inquiry into the Climate Change (Net Zero Future) Bill 2023 (20 September 2023)
- A Roadmap for Climate Reform - Environmental Defenders Office (2022)
- A Healthy Environment is a Human Right - Environmental Defenders Office (2022)
- Climate-ready planning laws for NSW: Rocky Hill and beyond - Environmental Defenders Office (March 2019)
- Submission to the NSW Environment Protection Authority State-wide coal mine consultation (2 October 2024)
- Submission to Inquiry into Planning System and Climate Change (10 November 2023)

In relation to First Nations engagement, we commend the following resources to the Commission:

- First Nations Clean Energy Network
- First Nations Heritage Protection Alliance
- Indigenous Land and Justice Research Group | UNSW Sydney
- Lowitja Institute Paper on Climate Change and Aboriginal and Torres Strait Islander Health – and other papers published by the Lowitja Institute - Lowitja Institute

Attachment A - Submission to the Inquiry into the 2024 Annual Report of the Net Zero Commission

Environmental Defenders Office

Submission to the Inquiry into the 2024 Annual Report of the Net Zero Commission

14 February 2025

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

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

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

www.edo.org.au

Submitted to:

Joint Standing Committee on Net Zero Future
NSW Parliament

For further information on this submission, please contact:

Rachel Walmsley
Deputy Director, Policy and Law Reform
T: (02) 9262 6989
E: rachel.walmsley@edo.org.au

Rachael Chick
Senior Solicitor
T: (02) 9262 6989
E: rachael.chick@edo.org.au

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

Executive Summary

Environmental Defenders Office (**EDO**) welcomes the opportunity to make a submission into the 2024 Annual Report of the NSW Net Zero Commission (**Commission**).

The Annual Report confirmed that NSW is currently not on track to meet any of its emissions reduction targets unless faster and more significant progress is made on emissions reductions decisively now.

> *"[U]nless faster and more significant progress is made, the target for 2030 will not be achieved, the 2035 target could be out of reach, and the challenge of meeting net zero by 2050 may become more difficult."*[1]

The Commission explicitly identified the large number of coal mine applications (for new and extended mines) currently under assessment as a risk to NSW being able to meet its emission reduction targets.[2]

It noted that emissions increases associated with extended or expanded coal projects would require other sectors to make greater emissions cuts, and conversely the importance of all sectors of the economy playing their part in meeting NSW's legislated emissions reduction targets. Emissions increases associated with extended or expanded coal projects "pose a major challenge for the state's regulatory arrangements".[3]

This submission primarily addresses the Commission's findings in the Annual Report relating to this identified major challenge. We would be happy to provide feedback on other issues if requested.

Summary of Recommendations

1. **The NSW Net Zero Commission be requested, as a matter of priority, to provide a detailed report to the NSW Government on the risks posed to the state's targets from increased emissions in the resources sector. This report must:**
    a. **integrate the most accurate possible data on open-cut coal mine fugitive emissions given the likely underestimation of those emissions in current projections;**
    b. **provide an assessment of the impact on the State's emission reduction targets if all the coal projects currently under assessment are approved;**
    c. **include advice on sectoral (resources) and sub-sectoral (coal mining) pathways to net zero.**

[1] NSW Net Zero Commission, *2024 Annual Report* (October 2024) available at https://www.netzerocommission.nsw.gov.au/2024-annual-report (**2024 Annual Report**), p 9.
[2] 2024 Annual Report, p 43.
[3] 2024 Annual Report, p 12.

2. **The NSW Net Zero Commission be requested to:**
    a. **review the NSW Government's legislative and policy framework relating to the assessment and approval of coal projects in NSW; and**
    b. **recommend action that should be taken by the NSW Government in respect of the assessment and approval of coal projects in NSW to ensure NSW meets its emissions reduction targets, and having regard to the guiding principles of the *Climate Change (Net Zero Future) Act 2023* (NSW).**

3. **The NSW Net Zero Commission be requested to:**
    a. **Review the regulation, compliance and enforcement of direct emissions from existing coal projects in NSW;**
    b. **Recommend action that should be taken by the NSW Government in respect of the regulation, compliance and enforcement of direct emissions from existing coal projects in NSW to ensure NSW meets its emissions reduction targets, and having regard to the guiding principles of the *Climate Change (Net Zero Future) Act 2023* (NSW).**

4. **The NSW Net Zero Commission be formally required to provide advice and recommendations to the decision-maker on all applications for new or expanded coal projects in NSW under s 15(3) of the *Climate Change (Net Zero Future) Act 2023* (NSW).**

The Commission is concerned about the risks to the state's targets from increased emissions in the resources sector

NSW is not on track to meet its 2030 and 2035 targets without further action. In August 2024 the NSW Government released the updated climate change projections which clearly demonstrated more urgent action is needed.

The Commission's 2024 Annual Report confirmed this, and observed that:

> *"unless faster and more significant progress is made, the target for 2030 will not be achieved, the 2035 target could be out of reach, and the challenge of meeting net zero by 2050 may become more difficult."*[4]

It particularly identified "the risks to the state's targets from increased emissions in the resources sector" as a cause for concern. It is clear that its primary concern is increased emissions from the coal mining sector in particular. As the Annual Report points out, "non-coal mining operations in the [resources] sector have a potential pathway to low emissions" because the sources of those

[4] 2024 Annual Report, p 9.

emissions have low emissions alternatives.[5] This implicitly acknowledges that this is not the case for coal.

In our view, there are **four key issues** associated with this sub-sector as relates to the Annual Report and to the functions of the Commission under the *Climate Change (Net Zero Future) Act 2023* (NSW) (**Net Zero Act**):

- fugitive emissions from open-cut coal mines are likely to be significantly higher than the figures set out in the Annual Report (and used by a range of NSW agencies and decision makers);
- there are a vast number of applications for new or expanded coal mines in NSW, and based on current regulatory practice their climate and net zero impacts are not being appropriately assessed and weighted by decision-makers;
- there is inadequate regulation or control of fugitive methane and other greenhouse gas (**GHG**) emissions at existing resources, particularly coal, operations; and
- the indirect emissions from the coal mined that will exacerbate climate change and have a significant and deleterious impact on the NSW population and environment.

These issues are addressed below. The Annual Report pointedly notes that:

> "*sustained progress towards achieving net zero requires not only the effective implementation of existing policies, but also the capacity to identify where these policies must be refined or improved. It also requires the capacity to identify and fill policy gaps and determine the scope for further action. Further opportunities to accelerate progress must also be considered. The NSW Net Zero Commission has a key role to play as an adviser to the NSW Minister for Climate Change, and through the minister, to the Parliament of NSW in helping achieve the necessary progress.*"

The Commission states that it will place priority on deep consideration of the issue of increased emissions associated with coal mine projects currently seeking planning approval, "[g]iven the criticality of this sector for achievement of NSW existing and future net zero emissions targets."[6]

EDO strongly endorses this approach, and requests that the Committee recommend that the Commission address the matters discussed below in its consideration of this issue.

1. Fugitive methane from open cut coal mines is likely to be significantly underestimated

The Commission's emissions assessment draws heavily on the National Greenhouse Accounts, which are informed by data reported under the *National Greenhouse and Energy Reporting Act 2007* (Cth) (**NGER Act**). The Annual Report stated that the resources sector contributed an estimated 13.8 Mt CO2-e to the state's direct emissions in 2022, making up 11 per cent of the state's total

[5] 2024 Annual Report, p 46.
[6] 2024 Annual Report, p 43.

emissions.[7] Fugitive emissions from coal mining made up 72.7% of direct emissions from the NSW resources sector, most of which are fugitive methane, with contributions from carbon dioxide escaping during the extraction of coal. In 2022, fugitive emissions from underground coal mines were estimated at 8.1 Mt CO2-e, while open cut coal mining contributed 2 Mt CO2-e.[8]

However, studies have shown that it is likely that actual fugitive emissions from open cut coal mines are significantly higher and could be double those being reported.[9] Open Methane's report looking into the variance between reported emissions based on NGER figures and actual emissions using data collected from satellite observations shows actual methane levels some 2.5 times higher than reported.[10] These findings were confirmed by International Energy Agency figures which show that Australia's fugitive emissions are nearly twice as high as national estimates.[11]

In December 2023, the Climate Change Authority (**CCA**) undertook a review of the NGER Act and scheme (**CCA Review**) and made significant recommendations in relation to how methane emissions, in particular fugitive emissions, are reported.[12] It found that where facilities reported using Methods 1-3 (which include open-cut coal mines), there were significant discrepancies between reported emissions and emissions estimated using satellite data.[13] Additionally, certain fugitive emissions don't have to be reported at all, such as those from decommissioned open cut coal mines.[14] It made recommendations to improve the accuracy of fugitive methane emissions estimates in Australia, through the use of higher order methods and independent verification of facility-level emissions estimates using top-down measurements. While the Australian Government has agreed in principle or agreed to these recommendations, there is no set date for commencement of the new reporting method.[15]

---

[7] Net Zero Commission, *2024 Annual Report* (December 2024), available at <https://www.netzerocommission.nsw.gov.au/2024-annual-report> (**2024 Annual Report**), p 47.
[8] 2024 Annual Report, p 47.
[9] A Reynolds and E Whittle, *Not Measured, Not Managed: Australia remains ignorant of its coal mine methane problem* (November 2023) https://ember-climate.org/insights/commentary/australia-coal-mine-methane-problem/.
[10] P Rayner and A Grant, *Open Methane's First Results Build the Urgent Case for Improved Emissions Measurement* (30 April 2024) <https://openmethane.org/analysis/open-methane-first-result-builds-case-for-improved-measurement>.
[11] International Energy Agency, *Global Methane Tracker 2022 Methane and Climate Change* https://www.iea.org/reports/global-methane-tracker-2022/methane-and-climate-change; Institute for Energy Economics and Financial Analysis, *Fugitive methane emissions cast dark cloud over Australia's Net Zero ambitions* (5 July 2023) <https://ieefa.org/articles/fugitive-methane-emissions-cast-dark-cloud-over-australias-net-zero-ambitions>.
[12] Climate Change Authority, *2023 Review of the National Greenhouse and Energy Reporting Legislation* < https://www.climatechangeauthority.gov.au/sites/default/files/documents/2023-12/2023%20NGER%20Review%20-%20for%20publication.pdf> (**CCA Review**).
[13] CCA Review, pp 5-6, 65-84.
[14] CCA Review, p 76.
[15] CCA Review, p 117.

As such, unless and until the federal Government has implemented the CCA's recommendations on methane reporting under the NGER Act scheme, reliance on NGER Act scheme data for open cut coal mine emissions is likely to significantly underestimate those emissions, with consequential impacts on sector transition pathways, the Net Zero Dashboard, and the achievement of NSW's emissions reduction targets. More accurate data should be sought as a matter of priority, and any assessment or advice addressing the resources sector should be based on the updated estimates of open-cut coal mine emissions.

Accurate data on methane emissions is particularly important because methane is a potent greenhouse gas and has more than 28 times the warming potential than carbon dioxide over a 100-year period with an atmospheric life of around 12 years. It is responsible for around 30% of the rise in global temperatures since the industrial revolution.[16]

It has been established that given its short atmospheric lifetime, the benefit of acting now to rapidly reduce methane emissions will result in rapid reduction of warming, making methane one of the best ways of limiting warming in this, and subsequent decades.[17] In fact, the United Nations Environmental Program's 2021 Global Methane Assessment (GMA) found that "mitigation of methane is very likely the strategy with the greatest potential to decrease warming over the next 20 years."[18] This view is supported by the IEA which has stated that 'rapid and sustained reductions in methane emissions are key to limiting global warming to 1.5°C in the immediate future. [19]

The Annual Report found that "[t]he April 2024 projections show NSW barely reaching its targets for 2030 and 2035, but only under the most optimistic assumptions modelled"[20]. These projections are based on a substantial underestimation of open-cut coal mine fugitive emissions. In order to truly understand the task of meeting the State's emission reduction targets, and formulate and implement plans for the whole of the economy, accurate emissions data for coal mine methane must be obtained and integrated into all relevant advice and decisions.

2. The risk of increased emissions associated with the sizeable pipeline of coal mine extension and expansion applications

The Annual Report highlighted the Commission's concern that increased emissions associated with the large number of new or expanded coal mining projects risks the achievement of NSW's emissions reduction targets. and that in particular the "potential emissions increases from [coal]

---

[16] IEA *Global Methane Tracker 2022 Methane and Climate Change* <https://www.iea.org/reports/global-methane-tracker-2022/methane-and-climate-change>.
[17] United Nations Environment Programme & Climate & Clean Air Coalition *Global Methane Assessment: Benefits and Costs of Mitigating Methane Emissions* (2021), p 21.
[18]United Nations Environment Programme & Climate & Clean Air Coalition, *Global Methane Assessment: Benefits and Costs of Mitigating Methane Emissions* (2021), p 17.
[19] International Energy Agency, *Methane and Climate Change, Global Methane Tracker 2022 (2022)*. Available at <https://www.iea.org/reports/global-methane-tracker-2022/methane-and-climate-change>.
[20] 2024 Annual Report, p 10.

projects seeking planning determination pose a major challenge for the State's regulatory arrangements."[21]

The Commission observed that at the time of the writing of the Annual Report, a number of coal mine extension projects had recently received approval, and that 33 planning applications for existing coal operations were being considered by the Planning Department, 22 of which would have potential impacts on the state's emissions.

EDO agrees that this is a significant risk. In our experience, there continues to be a lack of coordinated whole of government approach to meeting the emissions reductions targets as relates to coal mining (both for existing operations and those undergoing planning assessment). Although some initiatives, such as the *NSW EPA Guide to Large Emitters*, are slowly being rolled out, there has been reluctance by regulators such as the Planning Department and EPA to utilise tools already available to them to require reductions in direct GHG emissions. This is despite the May 2024 NSW Government direction to entities involved in assessment and decision-making processes under the planning system to consider NSW's emissions-reduction targets and, to the extent relevant, consider the guiding principles of the Net Zero Act when examining new developments.[22]

Recommendation 1: The NSW Net Zero Commission be requested, as a matter of priority, to provide a detailed report to the NSW Government on the risks posed to the State's targets from increased emissions in the resources sector. This report must:

a. integrate the most accurate possible data on open-cut coal mine fugitive emissions given the likely underestimation of those emissions in current projections;
b. provide an assessment of the impact on the State's emission reduction targets if all the coal projects currently under assessment are approved;
c. include advice on sectoral (resources) and sub-sectoral (coal mining) pathways to net zero.

EDO has concerns about a number of aspects of the assessment and approval of new and expanded coal mines as relevant to the work of the Commission and would welcome the opportunity to make a detailed submission to the Commission on law and policy gaps and improvements that could be made. For example (but by no means an exhaustive list):

- There is currently no transparency around if or how the projected emissions from projects under assessment have been integrated into the Net Zero Dashboard, and if or how any proposed approval of such projects is consistent with the NSW emissions reductions targets.

[21] 2024 Annual Report, p 43.
[22] NSW Government, *Ministerial Statement Updates regarding Net Zero Plan Stage 1: 2020-2030 and previous Implementation Updates* (20 May 2024), available at <https://www.energy.nsw.gov.au/nsw-plans-and-progress/government-strategies-and-frameworks/reaching-net-zero-emissions/update>.

- Applications for modification of coal projects, even those associated with increased extraction, or extraction for a longer period, continue to be assessed and approved by the Planning Department, without the sufficient scrutiny, public input, and independent expert advice that is warranted for projects which cumulatively (and in some instances, individually) pose such a risk to the achievement of the State's emission reduction targets. These modifications should in our view be referred to the Independent Planning Commission for determination.

- Third party merits review is a crucial transparency and accountability measure that promotes good decision making.[23] Merits review rights for objectors should be restored in relation to decisions on applications for new or expanded projects with significant direct or indirect GHG emissions (for example, through a new ministerial direction directing public meetings for coal or gas projects).

- The *Strategic Statement on Coal Exploration and Mining in NSW*, made under former Minister for Resources John Barilaro, is inconsistent with the Net Zero Act but has yet to be formally rescinded and its status is unclear. It should be formally rescinded.

- Conditions placed on development consents under the *Environmental Planning and Assessment Act 1979* (NSW) (**EP&A Act**) and on Environment Protection Licences under the *Protection of the Environment Operations Act 1997* (NSW) (**POEO Act**) do not appropriately limit scope 1 and 2 conditions, even where mitigation measures are readily available.

The coal mining sector must wind down in order to meet State and National emissions reduction targets

The Commission found that "[a]ny emissions increases associated with extended or expanded projects would require all other sectors to make greater emissions reductions if the state is to meet its emissions reduction targets. The emissions increases pose a major challenge for the state's regulatory arrangements."[24] As set out above, it implicitly acknowledged that there is no

[23] See, for example, the Independent Commission Against Corruption, *Anti-corruption safeguards in the New South Wales planning system* (2012), available at <https://www.icac.nsw.gov.au/ArticleDocuments/625/Anti-corruption_safeguards_and_the_NSW_planning_system_2012_c_.pdf.aspx>.
[24] 2024 Annual Report, p 12. Footnotes omitted.

way for direct emissions from coal mines to be entirely mitigated.[25] Indirect emissions from coal must also cease as soon as possible for global temperature rise to be stabilized at 1.58^{0}C.[26]

The NSW Government policy is that all sectors ratchet down emissions to meet NSW's legislated targets.

The Annual Report observed that the reduction in resource sector emissions from 2005 to 2022 was primarily due to the closure of coal mines. Approving new or extended coal mines will likely see a corresponding rise in emissions, particularly in light of the extremely lax regulation of GHG emissions at coal mines discussed above.

On 3 October 2024, the federal analogue to the Commission, the Climate Change Authority, released its *Sector Pathways Review* - 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] Its sectoral pathway for the resources industry[28] set out existing and prospective technologies for decarbonization of the sector, and was informed by published literature where available, as well as views expressed during stakeholder engagement.[29] It found 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".[30]

That is, there is no credible place for an expanding fossil fuel subsector in the resources sector if Australia is to meet its 2050 emissions reduction commitments. This is also the case in NSW.

The Annual Report was clear in its assessment of the impact that any new coal approvals will have on the rest of the resources sector, and the rest of the economy:

> *"Any emissions increases associated with extended or expanded projects would require all other sectors to make greater emissions reductions if the state is to meet its emissions reduction targets"*[31]

---

[25] See 2024 Annual Report, p 46.
[26] International Energy Agency, *Net Zero by 2050, A Roadmap for the Global Energy Sector* (October 2021), available at < https://iea.blob.core.windows.net/assets/deebef5d-0c34-4539-9d0c-10b13d840027/NetZeroby2050-ARoadmapfortheGlobalEnergySector_CORR.pdf>; International Energy Agency, *World Energy Outlook 2023* (2023), available at <https://iea.blob.core.windows.net/assets/86ede39e-4436-42d7-ba2a-edf61467e070/WorldEnergyOutlook2023.pdf >
[27] https://www.climatechangeauthority.gov.au/sector-pathways-review
[28] Available at https://www.climatechangeauthority.gov.au/sites/default/files/documents/2024-09/2024SectorPathwaysReviewResources.pdf.
[29] Climate Change Authority, *Sector Pathways Review - Part 1 Resources*, p 5.
[30] Climate Change Authority, *Sector Pathways Review - Part 1 Resources*, pp 4-5.
[31] 2024 Annual Report, p 43.

Continued approval of new and extended coal mines will require greater reductions in the rest of the resources sector, and also require greater reductions in sectors where decarbonization is significantly more difficult, such as agriculture.

This is inconsistent with the polluter pays principle which, as one of the principles of Ecologically Sustainable Development,[32] is one of the Guiding Principles of the Net Zero Act.[33]

To assist decision-makers to comply with the Net Zero Act and implement the Government's May 2024 direction, the Commission should be formally required to provide advice and recommendations to the decision-maker on all proposed new or expanded coal projects in NSW under section 15(3) of the Net Zero Act.

Recommendation 2: The NSW Net Zero Commission be requested to:

a. review the NSW Government's legislative and policy framework relating to the assessment and approval of coal projects in NSW; and

b. recommend action that should be taken by the NSW Government in respect of the assessment and approval of coal projects in NSW to ensure NSW meets its emissions reduction targets, and having regard to the guiding principles of the *Climate Change (Net Zero Future) Act 2023* (NSW).

Recommendation 3: The NSW Net Zero Commission be formally required to provide advice and recommendations to the decision-maker on all applications for new or expanded coal projects in NSW under s 15(3) of the *Climate Change (Net Zero Future) Act 2023* (NSW).

3. Inadequate regulation/control of fugitive methane and other GHG emissions at existing resources, particularly coal, operations

Currently, direct emissions from existing NSW coal mines are not regulated in practice.

Although most newer development consents for coal mines contain a condition that operators implement all reasonable and feasible steps to reduce GHG emissions, in practice this is devolved to a management plan to be approved by the Planning Secretary. To date, despite this requirement the Secretary has routinely approved GHG emission management plans that fail to set out adequate measures to reduce GHG emissions. A desktop review conducted by the Lock the Gate Alliance found that, despite this condition, at most sites GHG emissions are increasing.

In addition, these management plans are rarely updated to require implementation of new technologies, even as these technologies become economically viable and practical to implement to reduce GHG emissions.

[32] As described in the *Protection of the Environment Administration Act 1991* (NSW), s 6(2).
[33] See *Climate Change (Net Zero Future) Act 2023* (NSW), s 8(6).

The current approved Management Plans mean that in practice, coal mining proponents are not addressing their GHG emissions despite a condition being imposed on their development consent minimise their Scope 1 and 2 GHG emissions.

The primary mechanism for pollution control in NSW is the POEO Act, and Environment Protection Licences granted under Despite methane being a pollutant capable of regulation under the POEO Act, no NSW EPL for a coal mine contains a direct requirement that methane be monitored or reported on, let alone any conditions limiting or otherwise requiring the reduction of methane emissions.

As fugitive methane emissions from existing coal mines are a significant source of NSW GHG emissions, it is imperative that regulators (and particularly the EPA and the Planning Department) require an immediate ratcheting down of these emissions. If operators are unwilling or unable to meet these limits through currently existing technology, production must be required to be reduced or halted to meet these limits. This is a common requirement under development consents and EPLs in relation to a range of other air pollutants.[34]

Recommendation 4: The NSW Net Zero Commission be requested to:

a. review the regulation, compliance and enforcement of direct emissions from existing coal projects in NSW; and

b. recommend action that should be taken by the NSW Government in respect of the regulation, compliance and enforcement of direct emissions from existing coal projects in NSW to ensure NSW meets its emissions reduction targets, and having regard to the guiding principles of the Climate Change (Net Zero Future) Act 2023 (NSW).

4. Indirect emissions from coal mines and gas projects are relevant to the Net Zero Principles

We cannot comment on the issue of the resources sector and its climate change impacts without raising the issue of indirect emissions, which are overwhelmingly the largest category of emissions from coal and gas projects in NSW. Whether or not these indirect emissions are being released in NSW (and therefore included under the NSW emission reduction target), they add to the atmospheric concentration of GHGs and consequent catastrophic climate change and must be considered by all decision makers.

The guiding principles of the Net Zero Act acknowledge that climate change is a serious threat to the social, economic and environmental wellbeing of NSW. The Net Zero Act requires early action to address climate change to minimise the cost and adverse impacts and consider economic risk of delaying action to address climate change is identified. Continued approvals of fossil fuel

[34] See, for example, condition O3.4 of EPL 20850 for the Mt Pleasant Coal Mine, available at <https://app.epa.nsw.gov.au/prpoeoapp/Detail.aspx?instid=20850&id=20850&option=licence&searchrange=licence&range=POEO%20licence&prp=no&status=Issued>.

projects which will, through both direct and significant indirect emissions of GHG pollutants, contribute to and exacerbate climate change, is inconsistent with these principles.

Attachment B - Summary of key recommendations: Improving Regulation of Coal Mine Methane in NSW

Environmental Defenders Office

May 2025

EDO Report: Improving Regulation of Coal Mine Methane in NSW – Summary of key recommendations

While this report was being finalised in May 2025, NSW was in the grip of a one-in-500-year[i] flooding disaster. The areas most affected have, since 2019, experienced a succession of unprecedented natural disasters, including ex-Tropical Cyclone Alfred in March 2025, extreme flooding events across 2020-2022; and the devastating Black Summer bushfires of 2019-2020.[ii] Tragically, many people have lost their lives, many more have lost homes and businesses, and millions of animals have perished. Insurance premiums are becoming unaffordable, and some areas are beginning to be considered uninsurable. [iii]

Climate change is increasing the frequency and intensity of natural disasters. The May 2025 NSW floods have been found to be "driven by very rare exceptional meteorological conditions whose characteristics can mostly be ascribed to human driven climate change."[iv] The frequency and severity of the natural disasters NSW has experienced since 2019 are a stark warning for the future. With increasing global temperatures, extreme weather in Australia will continue to escalate.[v]

Climate change is largely the result of the extraction and combustion of fossil fuels, and the consequent release of greenhouse gases (**GHGs**), since the industrial revolution.[vi] 2024 was the hottest year on record globally, eclipsing the previous record-holder, 2023.[vii] It is clear that GHG emissions must be decreased urgently and rapidly.

The International Energy Agency has stated that the single most effective measure that can be taken now to mitigate the impacts of climate change in the near and medium term is to reduce methane emissions. [viii]

Methane is a potent greenhouse gas and has more than 84 times the warming potential than carbon dioxide over a 20-year period with an atmospheric life of around 12 years.[ix] Due to this, rapid and sustained reductions in methane emissions are key to limiting global warming to 1.5°C in the immediate future. [x]

Currently, methane emissions from NSW coal mines are not controlled at all under environmental protection licences (**EPLs**), and are not controlled in practice under vaguely drafted conditions of development consents. A business-as-usual approach to the regulation of existing, proposed, and decommissioned coal mines is incompatible with emissions reduction targets prescribed by the *Climate Change (Net Zero Future) Act 2023* (NSW) (**Net Zero Act**), and with the NSW Government policy that all sectors ratchet down emissions to meet those targets.

The evidence is clear, NSW cannot meet its legislated emission reduction targets without immediate and concerted change,[xi] including radically reducing methane emissions from coal mines. If coal mines do not reduce their emissions, other sectors of the NSW economy will have to pick up the slack.

There are however a number of actions that regulators can take right now, under the existing regulatory framework, to materially reduce the emission of coal mine methane, that would make a significant contribution to meeting NSW legislated emissions reduction targets.

1. Methane emissions from proposed new or expanded coal mines pose a risk to the NSW economy and emissions reduction targets

The most effective measure to reduce coal mine methane emissions in NSW is to stop approving new coal mines or expansions to existing coal mines.

This is available to decision-makers under current laws and can be implemented immediately. In our view, scientific evidence, the public interest as interpreted by NSW Courts,[xii] NSW's emissions reduction targets and the NSW Net Zero Principles all necessitate the refusal of any applications for new or expanded coal projects under the *Environmental Planning and Assessment Act 1979* (NSW)(**EP&A Act**). These projects can and should be refused development consent under the planning framework as currently exists.

This is made clear by independent, statutory, NSW and Federal climate advisory bodies. The NSW Net Zero Commission in its 2024 Annual Report was emphatic in its concern that increased emissions associated with the large number of new or expanded coal mining projects risks the achievement of NSW's emissions reduction targets.[xiii] It was clear in its assessment that any new coal approvals will have a detrimental impact on the rest of the resources sector, and the rest of the economy.[xiv] The Federal Climate Change Authority's (**CCA**) analysis of net zero pathways is 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".[xv]

That is, there is no credible place for an expanding fossil fuel subsector in the resources sector if NSW, and Australia, are to meet respective emissions reduction commitments.

2. Methane emissions from existing and decommissioned coal mines can and must be reduced

Currently, direct emissions from existing NSW coal mines, especially fugitive methane emissions, are not regulated in practice.

Amend coal mine EPLs to impose conditions requiring methane emissions reductions

EPLs issued under the *Protection of the Environment Operations Act 1997* (NSW) (**POEO Act**) are a key regulatory tool for the EPA to achieve its statutory objectives and yet they are significantly underutilised.

EPLs can be varied by the EPA at any time it sees fit, [xvi] and methane emissions, being air pollutants for the purpose of the POEO Act, could be controlled under EPLs just as many other air pollutants are.

However, currently no EPL for a NSW coal mine contains a direct requirement that methane be monitored or reported on, let alone any conditions requiring the reduction of methane emissions. Even the commencement of the Net Zero Act has not resulted in a change to EPA practice on regulating coal-mine methane. Fifty eight coal mine EPLs were reviewed in January 2024-January 2025, and none of these reviews resulted in the imposition of conditions that impose limits on, or require monitoring or reporting of, methane emissions, despite commitments made in the EPA Climate Change Action Plan and despite the guiding principles of the Net Zero Act.

Revise management plans under development consents to include effective methane abatement measures

A number of common conditions on development consents could and should be used to require substantial methane abatement. However, in practice they are neither drafted with sufficient specificity and objectivity, nor interpreted and enforced, so as to impose any real mitigation requirements on methane (or other GHG) emissions.

In contrast to EPLs under the POEO Act, there is no power under the EP&A Act to unilaterally vary conditions of development consent. However, development consents for coal mines usually contain a condition that the Planning Secretary may direct an operator to review and revise a management plan required under the development consent.[xvii] Development consents for coal mines and gas projects invariably require the proponent to develop and implement an Air Quality and Greenhouse Gas Management Plan, which contain the on ground measures a proponent is required to implement for a given topic.

As such, the Planning Secretary should direct a review and require revision of all management plans relating to air quality and/or greenhouse gases, and all revised plans should include the "standard" methane mitigation requirements set out below.

3. "Standard" clear and enforceable methane mitigation requirements must be developed and imposed

Significant reductions in coal mine methane emissions from current projects can be achieved, with no legislative change, through the use of powers already available to regulators to impose and vary conditions on EPLs and management plans under development consents, as mentioned above. "Standard" requirements for coal mine methane mitigation and abatement should be developed and implemented consistently across planning, pollution, and mining approvals, including the following.

Impose numeric limits on methane emissions

EPLs and development consents must include enforceable methane emission limits and reviewable emission reduction targets that are consistent with legislated NSW emission reduction targets and sub-sectoral emissions reduction pathways. These limits must be gross (not net) emissions limits, and must exclude offsets. There must be a mechanism by which these limits ratchet down in accordance with a sub-sectoral emissions reduction pathway to net zero.

If operators are unwilling or unable to meet these limits through currently existing technology, production must be required to be reduced or halted to meet these limits. Suspending operations if a pollution trigger is met is a common requirement under development consents and EPLs in relation to a range of other air pollutants, as well as other pollution types.[xviii]

Ensure all requirements are objective and enforceable

Current approvals that require mitigation measures for methane and other scope 1 and 2 GHG emissions invariably use the terms "reasonable and feasible", "practicable", and similar subjective or qualifying terms. These terms have been relied on by proponents to delay the implementation of mitigation measures under the guise that the available technology is neither economically reasonable nor feasible to implement on economic grounds and that further investigations are being conducted to find

reasonable and feasible mitigation measures. In this manner, no emissions reductions are achieved despite an ostensible requirement and ability to do so, given the subjective nature of this test. Requirements must not use this vague terminology, and instead use clear and objective language to provide meaningful direction and enforceability.

Require best available technologies to be implemented

Commercially competitive technologies already exist to significantly reduce coal mine methane emissions, particularly for underground mines, and must be explicitly required as standard methane abatement requirements.

The International Energy Agency's net zero scenario, which sees the global energy sector achieving net zero emissions by mid-century, includes a 75% reduction in methane between 2023 and 2030 using commercially competitive, existing technologies, such as pre- and post- coal seam drainage, capturing the methane and using it to generate electricity to be used on site or to be sold to the market, and treatment of ventilation air methane.[xix] In October 2024, the Federal CCA similarly found that deployment of this technology (which is in use commercially in other jurisdictions) "at even only a small portion of coal mines could result in meaningful emissions reduction".[xx]

Standard methane abatement requirements should refer to application of best available equipment and technology, including venting and flaring equipment. An independent body such as the Net Zero Commission should be responsible for reviewing international best practice standards periodically.

Require best practice measurement, monitoring, reporting and verification of methane emissions

Current studies have shown that Australia is significantly underreporting its methane emissions, especially from open-cut coal mines. [xxi] This underreporting threatens accurate understanding of any remaining 'carbon budget' and how emissions reductions efforts are tracking, and therefore needs to be urgently addressed.

Standard methane abatement requirements must include onsite monitoring of methane emissions, which are to be verified using independent experts implementing site-source verification. The monitoring methodology required must be the most accurate methodology available as defined by an independent body such as the Net Zero Commission.

Prohibit venting and flaring

Flaring should only be permissible in emergencies or where the company can prove the methane content in the gas does not meet a set threshold. Venting unabated methane to the atmosphere should be unlawful and treated as an air pollution offence under the POEO Act.

4. Regulators must be properly resourced and empowered to enforce conditions

Conditions of authorisations and other regulatory requirements are only as effective as their enforcement. It is essential that relevant enforcement teams in the Department, EPA, and Resources Regulator are provided with increased resourcing and specialist staff, with capacity to schedule audits and receive and scrutinize monitoring data to ensure compliance. It must be made clear to the regulated community that this is an area of focus for regulators and there must be significant institutional, Government and Ministerial support of this enforcement.

5. Abandoned mine methane emissions must be prevented and mitigated

Methane emissions at abandoned mine sites,[xxii] or sites in care and maintenance, (known internationally as "abandoned mine methane") are already known to be a significant source of emissions in NSW and will become an increasing problem as projects reach the end of their project lifecycles.[xxiii]

Currently, the management of abandoned mine methane and the environmental impact of these sites falls into a regulatory no man's land. It is critical that NSW has laws and policies in place to ensure these sites are appropriately monitored and managed to mitigate current sources and prevent the exponential growth of abandoned mine methane as coal mines come offline.

Current sources of abandoned mine methane must be identified and controlled. An audit of all coal mines in care and maintenance for methane seepages and leakages must be undertaken.

For more information:

Rachael Chick, Senior Solicitor, Policy and Law Reform
rachael.chick@edo.org.au

Revel Pointon, Managing Lawyer, Policy and Law Reform
revel.pointon@edo.org.au

Media contact:

James Tremain
0419 272 254
james.tremain@edo.org.au

[i] Natural Hazards Research Australia, *Taree floods show why we must future-proof volunteer the disaster response workforce*, 25 May 2025, available at: <https://www.naturalhazards.com.au/news-and-events/news-and-views/taree-floods-show-why-we-must-future-proof-volunteer-disaster>.
[ii] Climate Council, *Climate Council Statement On NSW Floods: More Destructive Due To Climate Change*, 23 May 2025, available at: <https://www.climatecouncil.org.au/climate-council-statement-on-nsw-floods-more-destructive-due-to-climate-change/>.
[iii] D Richardson, S Long, and R Campbell, *Premium price The impact of climate change on insurance costs*, The Australia Institute, November 2024, available at: <https://australiainstitute.org.au/wp-content/uploads/2024/11/P1707-Climate-change-and-insurance-Web.pdf>; Climate Council and Climate Valuation, *At Our Front Door: Escalating Climate Risks For Aussie Homes*, 15 April 2025, available at <https://www.climatecouncil.org.au/wp-content/uploads/2025/04/CC_CV-Report-At-Our-Front-Door-2025_Final.pdf>.
[iv] T Alberti and D Faranda, *Heavy rain in May 2025 New South Wales floods locally intensified by human-driven climate change*, ClimaMeter, Institut Pierre Simon Laplace, CNRS, May 2025, available at: < https://www.climameter.org/20250520-new-south-wales-floods>. https://doi.org/10.5281/zenodo.15489583
[v] Bureau of Meteorology, *State of the Climate 2024*, November 2022, available at: <bom.gov.au/state-of-the-climate/2024/documents/2024-state-of-the-climate.pdf> (**State of the Climate 2024**), p 2.
[vi] See, for example: State of the Climate 2024, pp 24-26; AdaptNSW, *Causes of Climate Change*, <https://www.climatechange.environment.nsw.gov.au/why-adapt/causes-climate-change>.
[vii] World Meteorological Organisation, *WMO confirms 2024 as warmest year on record at about 1.55°C above pre-industrial level*, 10 January 2025, available at: <https://wmo.int/news/media-centre/wmo-confirms-2024-warmest-year-record-about-155degc-above-pre-industrial-level>.
[viii] International Energy Agency, *Global Methane Tracker 2025*, May 2025, available at: <https://www.iea.org/reports/global-methane-tracker-2025> (**IEA Global Methane Tracker 2025**), p 16.
[ix] IEA Global Methane Tracker 2025, p 16.

[x] IEA Global Methane Tracker 2025; United Nations Environment Programme & Climate & Clean Air Coalition, *Global Methane Assessment: Benefits and Costs of Mitigating Methane Emissions*, 2021, p 17.
[xi] Net Zero Commission, 2024 Annual Report (December 2024), available at <https://www.netzerocommission.nsw.gov.au/2024-annual-report> (**NZC 2024 Annual Report**) , p 10.
[xii] In making decisions under the EP&A Act, the public interest includes consideration of the principles of ecologically sustainable development, which include the consideration of the impacts of a development on climate change, and the impact of climate change on a development: See for example *Minister for Planning v Walker* (2008) 161 LGERA 423; [2008] NSWCA 224; *Aldous v Greater Taree City Council* (2009) 167 LGERA 13; [2009] NSWLEC 17; *Gloucester Resources Limited v Minister for Planning* [2019] NSWLEC 7.
[xiii] NZC 2024 Annual Report, p 43.
[xiv] NZC 2024 Annual Report, p 43.
[xv] 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**), pp 118-119.
[xvi] POEO Act, s 58. Noting that, for State Significant Developments, this only applies after the first licence review period (5 years): EP&A Act, s 4.42(2)(c)
[xvii] For example see: Wilpinjong Development Consent Schedule 5 – Environmental Management, Reporting and Auditing, condition 5(e) and Schedule 2 – General Environmental Conditions, condition 4.
[xviii] See, for example, condition O3.4 of EPL 20850 for the Mt Pleasant Coal Mine, available at <https://app.epa.nsw.gov.au/prpoeoapp/Detail.aspx?instid=20850&id=20850&option=licence&searchrange=licence&range=POEO%20licence&prp=no&status=Issued>.
[xix] International Energy Agency, *Methane Abatement*, <https://www.iea.org/energy-system/fossil-fuels/methane-abatement>.
[xx] CCA Sector Pathways Review 2024, pp 121-123.
[xxi] Climate Change Authority, *2023 Review of the National Greenhouse and Energy Reporting Legislation* (2023) <https://www.climatechangeauthority.gov.au/sites/default/files/documents/2023-12/2023%20NGER%20Review%20-%20for%20publication.pdf> (**CCA 2023 NGER Review**), pp 5-6, 65-84, 117. See also: International Energy Agency, *Global Methane Tracker 2022 Methane and Climate Change*, available at <https://www.iea.org/reports/global-methane-tracker-2022/methane-and-climate-change> (**IEA 2022 Global Methane Tracker**); Institute for Energy Economics and Financial Analysis, *Fugitive methane emissions cast dark cloud over Australia's Net Zero ambitions* (5 July 2023), available at <https://ieefa.org/articles/fugitive-methane-emissions-cast-dark-cloud-overaustralias-net-zero-ambitions>; 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-forimproved-measurement>.
[xxii] A Reynolds and E Whittle, *Not Measured, Not Managed: Australia remains ignorant of its coal mine methane Problem*, Ember, November 2023, available at <https://ember-climate.org/insights/commentary/australia-coal-mine-methaneproblem/>.
[xxiii] The Australia Institute, *Dark side of the boom: What we do and don't know about mines, closures and rehabilitations*, 2017, available at <https://australiainstitute.org.au/report/dark-side-of-the-boom/>.