

3rd October 2025

New South Wales (NSW) Environment Protection Authority (EPA)
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Parramatta NSW 2150
By email: climatechange.review@epa.nsw.gov.au

Glencore Submission: NSW EPA's Draft Climate Change Licensee Requirements

Glencore welcomes the opportunity to provide feedback on the EPA's Draft Climate Change Licensee Requirements, Climate Change Mitigation and Adaptation Plans: Mitigation Requirements and Greenhouse Gas Mitigation Guide for NSW Coal Mines (Draft Requirements). Glencore recognises the EPA's role in supporting industry and the community to meet the Commonwealth and NSW targets to reduce net greenhouse gas emissions.

Glencore notes the NSW net emission reduction targets legislated in the Climate Change (Net Zero Future) Act 2023, including by at least 50% by 2030, by at least 70% by 2035, and to zero by 2050. While we acknowledge the climate ambitions of the NSW Government, it is important to have a single national approach to achieving emission reduction targets for mining and industrial sectors across Australia to avoid unnecessary duplication, increased and unreasonable costs of compliance, and potential negative impacts on key national policy measures (including the Safeguard Mechanism and carbon market under the Australian Carbon Credit Unit (ACCU) scheme).

The Australian Government reformed the Safeguard Mechanism in 2023 to reduce emissions at Australia's largest industrial facilities, including by introducing steeply declining baseline rates for covered facilities. The 2026–27 review of the Safeguard Mechanism is expected to result in increased compliance obligations for covered facilities post 2030. The Australian Government has also recognised its use of the highest order methods globally for coal mine emissions reporting and committed to reviewing fugitive emissions reporting methods under the National Greenhouse and Energy Reporting Scheme (NGERS) to ensure they remain fit-for-purpose.

Glencore believes that NSW Government climate change policy should be non-duplicative, informed, pragmatic, and focused on outcomes. It should provide greater certainty for business investment in NSW whilst supporting investment in least-cost emissions reduction across Australia. Therefore, the Draft Requirements should not be adopted in their current form and Glencore strongly urges the NSW Government to reconsider its proposed approach. It is essential that any policy implemented by the EPA to reduce net greenhouse gas emissions in NSW should ensure that licensees are provided the opportunity to reduce their emissions in recognition of their individual circumstances and challenges. The EPA should align with the national approach to emissions reductions in industrial sectors.

Our company has made strong global commitments to climate change, including our ambition to become a net zero total emissions company by 2050. Our strategy acknowledges that the transition to a low-emissions future will not be linear or uniform across different geographies and timeframes. Therefore, we advocate for reforms aimed at achieving cost-effective emissions reductions while recognising the constraints and uncertainty related to the timing and availability of step-change abatement technologies.

Glencore supports ongoing consultation by the NSW Government to ensure that climate policy design considers existing Commonwealth climate policy, reporting requirements and emissions accountability to prevent unnecessary duplication and unduly onerous regulation of licensees.

Glencore (and related entities) hold thirteen Environmental Protection Licenses (EPLs) for premises in NSW, of which twelve are Commonwealth Safeguard facilities. Glencore (and related entities) are also progressing a number of development applications which (if granted approval) would need to adhere to the Draft Requirements. Our feedback on the Draft Requirements is informed by our understanding that they are intended to be applied to all in-scope licensed premises, which will include retrospective application to existing premises EPLs and facilities that are subject to the Commonwealth Safeguard Mechanism.

Glencore also supports the detailed submission provided by the NSW Minerals Council.

Sincerely,



Ian Cribb
Chief Executive Officer
Glencore Coal Australia

Glencore in Australia

Glencore is one of Australia's most diversified mining companies and has been investing in Australia for more than 25 years. We operate 20 mines and are the largest producer of coal, cobalt, nickel, zinc and lead and second-largest producer of silver in Australia. We also operate metals processing facilities in Queensland and Western Australia.

We responsibly source the commodities that advance everyday life. The natural resources that Glencore produces in Australia are found in everything from mobile phones to airplanes, from solar panels and wind turbines to medical devices and kitchen appliances.

Our business makes an important socio-economic contribution to Australia in the city and the regions, whether its employing apprentices, tradespeople, engineers and environmental scientists through to supporting local businesses and community groups.

In 2024, Glencore directly contributed nearly \$18 billion to the Australian economy and had around 17,420 employees and contractors. This contribution included \$11.8 billion spent on goods and services from over 6,810 suppliers, \$3.6 billion taxes and royalties paid to governments and \$2.5 billion in wages and salaries¹.

In 2024, Glencore directly contributed \$7.5 billion to the New South Wales economy and had around 6,370 employees and contractors. This contribution included \$4.6 billion spent on goods and services from over 3,210 suppliers, \$1.8 billion taxes and royalties paid to government and \$1.1 billion in wages and salaries.

Glencore understands that climate change is a global challenge and a shared responsibility. As one of the world's largest diversified resource companies, Glencore is playing a role in supporting the transition to a low carbon future. Beyond supporting the energy transition overall through the supply of metals, Glencore takes a holistic approach to decarbonisation, focusing on reducing our combined industrial Scope 1, 2, and 3 emissions. Our route to achieving net zero industrial emissions (against a 2019 baseline) is as follows:

- 15% reduction in total emissions by 2026;
- 25% reduction in total emissions by 2030;
- 50% reduction in total emissions by 2035; and
- an ambition to achieve net zero total emission by 2050, subject to a supportive policy environment by the end of 2050.

Glencore has also committed to responsibly manage the decline of its global thermal coal portfolio over time.

¹ Glencore, Glencore Australia – Our Contribution (2025), available at <https://www.glencore.com.au/who-we-are/our-contribution> (NB: the economic contribution described above has been adjusted (compared to the linked source) to exclude spend on overseas suppliers)

Executive Summary

The Draft Requirements signal the introduction of mandatory climate change mitigation requirements proposed to be written in as conditions of EPLs held by in-scope premises in NSW. Glencore strongly urges the NSW Government to reconsider its proposed approach under the Draft Requirements. We would like to draw attention to several key issues which need to be considered by the EPA in forming efficient, practical and effective climate policies that are consistent with the Australian Government's climate policy framework and goals.

The Draft Requirements propose a highly prescriptive approach that disregards industry feedback and is inconsistent with the EPA's usual approach to licensing. Notably, the EPA's *Guide to licensing*², which states that its approach to conditioning of EPL is "outcomes-based" to allow "flexibility for the licensee to determine how they achieve the environmental outcomes". The need for flexibility is supported by the importance of regulating premises based on an assessment of their site-specific circumstances and what is determined to be feasible at a particular site. This is reflected in the EPA's public statements regarding the principles that underpin their approach (as per page 5 of the EPA's *Proposed Climate Change Licensee Requirements*). These principles emphasise that:

1. *Requirements must be evidence-based*
2. *Requirements must be clear to comply with*
3. *That implementation of requirements is staged based on risk to ensure that licensees are making a meaningful contribution to NSW's GHG emissions reduction targets*
4. *That duplication must be avoided.*

Glencore believes that the EPA's proposed approach under the Draft Requirements fails to meet these principles and also the EPA Chief Executive Officer's stated objective³ that the EPA is working to "decarbonise without deindustrialising".

For the following reasons, Glencore consider that the Draft Requirements should not be adopted in their current form:

1. a lack of robust and reliable evidence supporting the Draft Requirements;
2. uncertain and unworkable abatement technology mandates;
3. misalignment with the national approach to emissions reductions;
4. potential to undermine emissions reporting under NGERs;
5. publication of forward-looking information may be commercially sensitive and could give rise to heightened greenwashing risk for licensees;
6. retrospective application to existing facilities will threaten future viability;
7. limitations on offset use; and
8. lack of government assistance to support required measures.

These key issues are discussed in detail below, with our responses to the survey questions asked by EPA as part of the consultation contained in the attached appendix.

Key Issues and Recommendations

As highlighted above, the Draft Requirements are not fit-for-purpose and should not be adopted in their current form. Key issues that need further consideration are:

² NSW EPA (2023), *Guide to licensing*, available at <https://www.epa.nsw.gov.au/sites/default/files/22p3981-guide-to-licensing.pdf>.

³ NSW EPA (2025), *A Message from our CEO (embedded video)*, available at <https://yoursay.epa.nsw.gov.au/climate-change-licensee-requirements>

1. A lack of robust and reliable evidence supporting the Draft Requirements

We believe there is inadequate evidence to support the feasibility of the proposed mitigation measures across the industry within the outlined timeframes. Of particular concern is that the EPA has not prepared an impact or cost-benefit analysis to inform the public consultation and assess the impacts to industry, the economy, or NSW community. This analysis is important to set out the rationale for the proposed requirements and its estimated benefits and costs. A robust evidence base and independent cost-benefit analysis is required for the public to consider the impacts of the proposed requirements on businesses and the economy before the Draft Requirements are finalised.

In addition, the EPA's reliance on the EMM Literature Review and Industry Scan provides an insufficient evidence base for coal mine operators to rely on (at a site-specific level) to implement the abatement measures and have confidence in their ability to mitigate the complex financial, technical and safety risks. This high-level desktop review also demonstrates that there are currently significant barriers and uncertainties associated with implementing the mitigation requirements, such as technical feasibility, availability, and cost.

The EPA's proposed approach will unfairly impact the coal mining industry, which should not disproportionately bear the decarbonisation burden for other industries. Glencore is concerned about the different treatment that the coal mining sector receives as opposed to other high-emitting sectors. By way of example, the EPA has recently published a draft protection of the environment policy for sustainable construction, which is supplemented by a detailed impact analysis assessing the implications of the proposed regulatory changes⁴

In preparing its impact or cost-benefit analysis, we submit that the EPA should take into account a range of factors which are not contemplated in the consultation documents supporting the Draft Requirements, including:

- the uncertainty associated with the proposed mitigation measures, in respect of the timeframes that may be required for the measures to become available and/or feasible for application in NSW;
- whether the measures would deliver any additional net emissions reductions when compared to the requirements of the Safeguard Mechanism;
- the application of technological and economic constraints in respect of the mitigation hierarchy;
- recognition of what is technically and commercially feasible for proponents over the life of a mine/project; and
- an assessment of economic factors and consequences of the additional regulatory obligations proposed to be imposed.

2. Uncertain and unworkable abatement technology mandates

We express our strong concerns about the overly prescriptive nature of the policy presented in the Draft Requirements.

⁴ NSW EPA (2025), Protection of the Environment Policy for Sustainable Construction, available at <https://www.epa.nsw.gov.au/Your-environment/Recycling-and-reuse/Strategic-direction-for-waste-in-NSW/Carbon-recycling-and-abatement/PEP-sustainable-construction>

The Draft Greenhouse Gas Mitigation Guide for NSW Coal Mines requires the adoption of several mitigation technologies that are not yet proven to be commercially viable, cost effective, safe, or effective in the NSW context. Specifically, many of the suggested measures - such as ventilation air methane (VAM) abatement, the use of low-carbon fuels, and the introduction of “zero-emission” vehicles - are either not currently feasible or not commercially available at the required scale.

Mandating technologies or methods that are not yet proven for application, or widely available, and have significant uncertainties regarding their timing, cost, and practicality, raises serious concerns. This is particularly the case where the Draft Greenhouse Gas Mitigation Guide for NSW Coal Mines itself and supporting materials make clear that such technologies remain unproven in the context of NSW coal mines. Their mandated adoption (in the absence of proven commercial viability) would be unreasonable and exposes the sector to unjustified risk.

The Draft Requirements suggest that exemptions may be sought, however the criteria for granting exemptions, or assessing feasibility, has not been provided. The EPA must define and outline criteria for feasibility, including financial feasibility, to ensure certainty of outcomes for licensees. On page 16 of the CCMAP Proposed Mitigation Requirements, the EPA states, *“It is not expected that reductions in emissions should be pursued ‘at any cost’. Nor does it mean that the preferred option will always be the lowest-cost option. However, it is important that the preferred option is cost-effective.”* These statements do not provide clarity on how the EPA would assess the feasibility and cost-effectiveness of emissions reduction.

Glencore is particularly concerned about the material safety issues and potential risks to workers that may arise as a result of the implementation of the Draft Requirements. We submit that:

- the NSW work health and safety legislation provides a robust framework for the management of WHS risks (including management of methane) by coal mine operators and significant financial penalties and potential criminal liability apply for failures to comply. There should be no appetite to consider implementing unproven technologies that puts workers at risk;
- there are significant science and engineering issues to overcome before VAM RTO technologies could be implemented safely at operational NSW coal mines. Any technology mandates must be preceded by comprehensive safety validation; and

In addition to Glencore’s safety concerns, the proposed timeframes for implementation are unreasonable and unachievable. For example, the proposed timeframes for implementing coal VAM abatement technologies are inconsistent with those set out in the Australian Government’s new Resources Sector Plan.⁵ The Resources Sector Plan also recognises that there are concerns with VAM being “*safely and efficiently deployed*” and does not consider commercial deployment before 2030-2035. Glencore considers that the Resources Sector Plan should guide the legitimate and appropriate timeframe for implementing certain technologies (e.g. VAM abatement). Similarly, the Transport & Infrastructure Sector Plan only contemplates initial demonstration of low carbon liquid fuels for heavy vehicles in the 2025-2030 period. The mining sector will be competing with aviation and other sectors for a limited supply of renewable diesel. The EPA should ensure that implementation of mitigation measures is aligned with the commercial availability and cost effectiveness of relevant technologies.

⁵ Department of Industry, Science and Resources - Department of Climate Change, Energy, the Environment and Water (2025), Resources Sector Plan - September 2025, available at <https://www.industry.gov.au/publications/resources-sector-plan>.

The Draft Requirements also fail to incorporate industry feedback indicating that abatement opportunities are highly site-specific and cannot be effectively managed through a one-size-fits-all framework. It is essential that any policy implemented by the EPA to reduce greenhouse gas emissions from NSW coal mines should ensure that operators are provided the opportunity to reduce their emissions in recognition of their individual circumstances and challenges. The Draft Greenhouse Gas Mitigation Guide for NSW Coal Mines mandating of specific technologies to the exclusion of other emerging or site-specific abatement options limits the flexibility of operators to pursue the most cost effective and feasible solutions for their circumstances. It is a significant divergence away from the widely accepted “lowest cost abatement” policy position and inconsistent with the sustainable development considerations under the Protection of the Environment Operations Act 1991.⁶

Glencore submits that the EPA should implement a more flexible and dynamic approach where mitigation measures are not prescribed and the EPA works with businesses on a site-specific basis to identify and understand the feasibility of potential mitigation measures.

3. Misalignment with national approach to emissions reduction

The reformed Safeguard Mechanism incentivises low emissions intensive production across covered industry sectors and was developed through extensive and iterative consultation. It is underpinned by declining net emission intensity limits as well as measures that acknowledge the technological and economic challenges of immediate decarbonisation e.g. flexibility to use ACCUs and Safeguard Mechanism Credits (SMCs), the provision of a cost containment measure to manage carbon price risk, the provision of multi-year monitoring periods and assistance to trade-exposed production.

The holistic design of the Safeguard Mechanism aims to achieve Australia's climate change commitments whilst minimising the risk of carbon leakage. While promoting lowest cost abatement and the use of offsets to reduce net emissions, the Safeguard Mechanism will play a central role in driving emissions reductions in the resources sector (as per the Resources Sector Plan). The Safeguard Mechanism also has a number of legislated outcomes that must continue to be met, including ongoing reduction in total onsite emissions across all facilities and maintaining a material incentive for on-site emissions reductions. This is done at the same time as ensuring that Australia's industrial sector remains competitive in a global net zero economy.⁷

Our principal position is that facilities that are covered by the Safeguard Mechanism should not be subject to additional state-based emissions reduction requirements for reasons including:

- the operation of the Safeguard Mechanism through the baseline decline rate will naturally require on-site abatement where feasible and provide a clear incentive to

⁶ Relevantly, that improved valuation, pricing and incentive mechanisms—namely, that environmental factors should be included in the valuation of assets and services, such as—environmental goals, having been established, should be pursued in the most cost effective way, by establishing incentive structures, including market mechanisms, that enable those best placed to maximise benefits or minimise costs to develop their own solutions and responses to environmental problems: see POEO Act s POEA Act 6(2)(d)(iii).

⁷ Department of Climate Change, Energy, the Environment and Water, Reforms to Australia's Safeguard Mechanism Rules 2023: Statement of Reasons under NGER Act s 22XS (2023), available at <https://www.dcceew.gov.au/sites/default/files/documents/statement-of-reasons-safeguard-mechanism.pdf>.

undertake cost-effective emissions reductions. The Safeguard Mechanism also provides incentives for on-site abatement through the ability to generate SMCs;

- it provides important consistency across each state and territory in terms of how high-emitting facilities are regulated and managed;
- no other federal or state legislation or regulatory instrument requires specific technology changes to be implemented, let alone for those changes to be implemented within a specific timeframe;
- the existing approach supports and incentivises innovation and low-cost abatement to achieve emission reduction targets; and
- through the Safeguard Mechanism and NGERs, the Commonwealth Government – as the government ultimately responsible for implementing Australia’s emission reduction targets under the Paris Agreement – receives emissions data to manage Australia’s national GHG inventory and track progress against the emissions reduction targets in Australia’s Nationally Determined Contribution (NDC).

We believe that the emissions reduction contribution of Safeguard facilities will provide a key contribution to the NSW NZF Act’s net emissions reduction targets. The Safeguard Mechanism also provides a ceiling on abatement costs through the cost containment measure, which indicates the Australian Government’s view on the cost-effectiveness of abatement.

The prescriptive measures outlined in the Draft Requirements are inconsistent with the underlying principles of the Safeguard Mechanism, which is intended to be outcomes-focused and to encourage least-cost, efficient emissions reduction. In contrast, the proposed approach risks “picking winners”, is not outcomes-focused, and does not promote efficient emissions reduction.

The target setting requirements outlined in the Draft Requirements create unnecessary duplication and contradict the EPA’s stated position in its Climate Change Action Plan 2023–26, *“We will ensure any emission limits or other licence requirements complement (and do not duplicate) NSW Government actions already taking place under the NSW Net Zero Plan, and any actions being taken by the Commonwealth Government (e.g. under the Safeguard Mechanism). Licensees will not be required to report the same information twice. We will also consider how to future-proof our approach, so that it recognises and allows for any future changes to Commonwealth policies or initiatives.”*

We believe it is imperative that any State or Territory based emission reduction efforts complement and support the national framework and not undermine its integrity. We are encouraged by the steps and approach taken by the Western Australian Government in this regard and believe this should factor into the NSW approach.

The Queensland Government has recently shown consideration of the Safeguard Mechanism in the design of its GHG Guideline⁸ which states, *“This guideline is intended to operate alongside Commonwealth laws and not duplicate requirements under the Safeguard Mechanism. This guideline does not impact Commonwealth obligations or benefits. This includes the ability to earn Safeguard Mechanism credit units (SMCs)”*. The Queensland GHG Guide also states, *“For projects captured by the Commonwealth Safeguard Mechanism, the emission reduction targets may be determined by the Safeguard Mechanism”*. We encourage the EPA to show similar consideration and alignment with the Federal Safeguard Mechanism.

⁸ Queensland Government, Guideline – Greenhouse Gas Emissions (July 2025), available at https://www.desi.qld.gov.au/policies?a=272936:policy_registry/era-gl-greenhouse-gas-emissions.pdf

The 2026–27 review of the Safeguard Mechanism is expected to result in increased compliance obligations for covered facilities. It is essential that the EPA aligns with the national approach to emissions reductions to reduce the risk of unnecessary additional costs or unintended consequences (including, for example, impacting the financial viability of an existing coal mine) and to promote clarity, efficiency and consistency for responsible emitters. Failing to do so risks affecting the investment environment in NSW and industry participants may be forced to invest in or develop projects in other jurisdictions that are more economically competitive.

4. Potential to undermine emissions reporting under NGERs

Glencore is concerned about the EPA's criticism of the capability and integrity of the NGERs framework for reporting greenhouse gas emissions from coal mines (including fugitive emissions). NGERs has been built and developed by the Australian Government over a period of more than 20 years and is nationally consistent, reflects international best-practice and complies with international reporting requirements.

We note the EPA's statement (on page 12 of the *Proposed Climate Change Licensee Requirements*) that: *"The methods used to report emissions to NGERs are based on estimates, and actual emissions can differ from these figures"*, citing the Climate Change Authority's (CCA) 2023 NGER Review. The EPA uses this statement to justify its inability to adopt an outcomes-based approach. However, these assertions do not accurately represent the CCA's findings and the Australian Government's response⁹ to the CCA's recommendation, which emphasised that Method 2 is the highest order IPCC method globally for estimating emissions from open cut mine operations. Specifically, the Australian Government stated: *"The current approach to emission estimation under Method 2 is equivalent to the highest (most sophisticated) IPCC method tier. Australia is currently the only country in the world to use methods of this tier to estimate fugitive methane and carbon dioxide emissions from both underground and open-cut coal mines..."* and *"To ensure the method remains fit for purpose and based on the best available science, technologies and practices, the government will review Method 2"*.

The above demonstrates the Australian Government's position that NGERs reporting methods reflect international best-practice. Despite this, the EPA has referenced emerging, non-regulated methods to challenge the integrity of NGERs reporting methods. These emerging methods have yet to be proven as fit-for-purpose in estimating coal mine emissions inventories in Australia or globally, mainly due to limitations such as poor temporal coverage, unreliable data, high uncertainty in estimated methane flow rates, and challenges in quantifying emissions in complex mine geometries.

Glencore notes that Australia is a signatory to the Global Methane Pledge and the Commonwealth Government will implement measures to reduce methane emissions across the mining sector (as per the Resources Sector Plan). The Commonwealth has also appointed an Expert Panel on Fugitive Methane Emissions to assess these technologies and the Expert Panel is due to report in 2027. In Glencore's view, deployment of these emerging methods should be guided by the findings of the Expert Panel and not pre-empted.

⁹ Australian Government, Australian Government response to the Climate Change Authority's 2023 Review of the National Greenhouse and Energy Reporting legislation available at <https://www.dcceew.gov.au/sites/default/files/documents/government-response-cca-ngcr-review.pdf>

As it stands, licensees are using approved NGER methods (including the use of Method 2 by all open-cut NSW Safeguard facilities). Glencore submits that the EPA's approach to measuring greenhouse gas emissions should follow the NGERS framework.

5. Publication of information that is commercially sensitive and may give rise to heightened greenwashing risk for licensees

The EPA's requirement for in-scope licensees to prepare and submit Climate Change Mitigation and Adaptation Plans (CCMAPs) every three years with forward looking 10 year projections would reveal commercially sensitive information and expose businesses to heightened greenwashing risks for a number of reasons.

The Draft Requirements proposes that CCMAPs must be prepared, submitted to the NSW EPA and published on a publicly accessible website, and updated every three years. CCMAPs must include current and projected emissions, including sources and quantities, and estimates of future emissions for each of the next 10 financial years and an outline existing and planned mitigation measures and offsets. Glencore believes that this scope of information is unduly onerous and unreasonable. The EPA's own analysis notes that no other reporting standard requires this level of detail in climate-related financial disclosures.

There are also issues from a practical, time and cost perspective. Even though companies that have already implemented similar plans under other schemes can re-use existing documentation for their CCMAPs (including for example, NGERS reports and disclosures made in sustainability statements submitted under the climate-related financial disclosures regime):

- separate reports are still required to be submitted to the EPA; and
- any gaps must be addressed through an addendum.

Therefore, the EPA's approach creates duplication and requires a range of new information that would not be covered by existing reporting obligations.

Glencore is extremely concerned about the requirement to submit 10-year emissions projections (which are then made public) every three years. Glencore is also concerned about the requirement for previous versions of CCMAPs to stay published. These requirements may lead to increased greenwashing perceptions and risk for proponents. We suggest that 10-year emissions projections should not be made public and are provided to the EPA separately to the CCMAPs if required for a legitimate purpose.

In addition, Glencore is concerned about the level of information required to be provided in relation to existing and planning mitigation measures and offset use. This will likely contain a range of commercially sensitive documentation and information and there is a risk that sensitive information relating to mitigation and offset strategies and long-term offtakes could be made public. This could have negative implications for the business from a regulator scrutiny perspective (for example if mitigation actions are not implemented as forecast) and for general issues related to the integrity of the ACCU market by impacting upon supply and cost.

We consider that the EPA must implement the necessary regulatory and policy framework to allow proponents to designate and redact commercially sensitive information before such information is published. We note that this is an option available for proponents under NGERS to ensure that confidential information is protected.

6. Retrospective application to existing facilities will threaten project viability

Glencore understands that the Draft Requirements are intended to be applied to all in-scope licensed premises, which will include retrospective application to existing premises EPLs.

We are concerned with the application to existing premises, particularly mines later in life which were planned, assessed and approved at a time when these requirements were not considered as part of the feasibility studies or financial modelling. Requiring existing operations to retrofit expensive mitigation technologies threatens project economics and may create perverse outcomes (e.g., early closure, loss of jobs).

We observe that this is a different approach to the approach that the EPA has taken to the waste sector. Specifically, the EPA's Landfill Guidelines¹⁰ apply only to new or varied EPLs. The Landfill Guidelines are used by the EPA to assess applications for new or varied landfill EPLs and to assess issues that arise during the operational and post-closure period of landfills.

We submit that the Draft Requirements should apply only to new or varied licence applications for coal mines, similar to the EPA's Landfill Guidelines.

7. Limitations on offset use

The Draft Requirements state that "The preference is for licensees to prioritise carbon offsets from NSW-based offset projects because these offsets count towards the NSW emissions inventory", and that, "The NSW EPA will continue to work with other NSW agencies and other jurisdictions on carbon accounting methods". We observe that the Draft Requirements stated preference for NSW offsets contrasts against approaches taken by other states and territories, notably Victoria's Climate Change Act 2017¹¹ and ACT's Climate Change and Greenhouse Gas Reduction Act 2010¹², both acknowledge an ability to use offsets from outside the jurisdiction.

We believe any policies that encourage ring-fencing or geographical constraint on carbon offset surrender to be inconsistent with the Safeguard Mechanism and present a high risk of distorting and undermining the national carbon offset market. Offset use should be consistent with the Safeguard Mechanism, which does not impose a restriction on the use of offsets from anywhere in Australia, provided that they are ACCUs.

8. Lack of government assistance to support required measures

Notwithstanding whether the EPA pursues the implementation of the Draft Requirements, tailored funding mechanisms in the front of grants and economic incentives are required. This is particularly important because:

- the implementation of the measures proposed under the Draft Requirements (particularly the abatement technologies for coal mines) may result in unreasonable and significant compliance costs for licensees (in excess of any benefits such as reduced costs related to ACCU or SMC need); and

¹⁰ NSW EPA, *Environmental Guidelines: Solid waste landfill* (2016), available at <https://www.epa.nsw.gov.au/sites/default/files/solid-waste-landfill-guidelines-160259.pdf>.

¹¹ Victorian Government, 2024, Climate Change Act 2017 (Part 2 Division 1), available at <https://content.legislation.vic.gov.au/sites/default/files/2024-06/17-5aa010-authorized.pdf>

¹² ACT Government, 2024, Climate Change and Greenhouse Gas Reduction Act 2010 (Part 2 Section 6), available at <https://www.legislation.act.gov.au/a/2010-41>

- the acceleration of regulatory action against the NSW coal mining industry (as opposed to other industries) places industry participants at an economic burden and disadvantage.

Existing facilities are at an increased disadvantage. Existing facilities did not include these costs within their initial project feasibility assessing and financial modelling to take financial investment decision on particular activities or projects.

The EPA has suggested that funding for the implementation of the abatement measures is available from:

- government grants (specifically, the NSW Government's High Emitting Industries (HEI) fund); and
- generation of SMCs by coal mines captured under the Safeguard Mechanism when their emissions fall below their baseline.

We recognise that the NSW Government has committed \$305 million in grant funding to the HEI fund for "feasibility studies through to commissioning".¹³ There are detailed eligibility and merit criteria for applications for HEI funding, including requirements for:¹⁴

- the applicant to contribute at least 50% of the eligible costs of the project (although higher contributions are preferred);¹⁵
- the project to align with a published or credible decarbonisation roadmap for the applicant's sector, business, facility, or region which includes technical and/or commercial considerations for decarbonisation; and
- the project to deliver emissions reduction that exceeds any applicable legislative requirements (which suggests that mandated adoption of technologies pursuant to EPL conditions could not be funded through HEI).

In our view, these are not reliable or guaranteed sources of funding for coal mines and there are inadequate funding mechanisms available to assist the coal mine industry in implementing the abatement measures within the anticipated timeframes, particularly if the measures relate to operational expenditure (such as low carbon fuels).

By way of example, in relation to funding mechanisms for mine abatement measures, the NSW Net Zero Commission Report 2024 Annual Report notes that:

- the Net Zero Industry and Innovation Program (which the HEI fund forms part of) provides grants and facilitation support for a range of abatement projects, including mine emissions. To date, including in 2023-24, no coal abatement projects have been funded;¹⁶ and

¹³ NSW Climate and Energy Action, 'High Emitting Industries grant', available at: <https://www.energy.nsw.gov.au/business-and-industry/programs-grants-and-schemes/high-emitting-industries-grant>.

¹⁴ NSW Office of Energy and Climate Change, *High emitting industries funding guidelines 2022-2024* (October 2022) 15, available at: <https://www.energy.nsw.gov.au/sites/default/files/2022-10/NSW-High-emitting-industries-funding-guidelines-2022-2024.pdf>.

¹⁵ NSW Office of Energy and Climate Change, *High emitting industries funding guidelines 2022-2024* (October 2022) 12, available at: <https://www.energy.nsw.gov.au/sites/default/files/2022-10/NSW-High-emitting-industries-funding-guidelines-2022-2024.pdf>.

¹⁶ NSW Net Zero Commission, *2024 Annual Report* (November 2024), available at https://www.netzerocommission.nsw.gov.au/sites/default/files/2024-12/NZC%202024%20Annual%20Report_V11.pdf.

- the Coal Innovation NSW Fund – which supports research on and demonstration of low-emissions coal technologies – has provided funding to one project (the RTO demonstration project at Appin Colliery).

In addition, the EPA’s proposals for SMCs to act as a funding mechanism for implementing the Draft Requirements is not reflective of Glencore’s understanding. Specifically:

- SMCs will only be issued at the conclusion of a reporting year after a facility has fallen below its baseline. Therefore, SMCs are unable to provide up-front financing for implementing the required abatement measures and in any case SMC prices may not cover the costs of the abatement measures;
- there are no financial additionality requirements for the generation of SMCs so proponents do not need to be informed “in advance”;
- compliance with the Safeguard Mechanism will become harder in future years as baselines continue to decline, which will lead to reduced SMC issuances; and
- there are uncertainties about the ability to bank SMCs post-2030.

If the EPA is committed to establishing improved policy settings to encourage the decarbonisation of NSW facilities, providing the necessary assistance to support the implementation of decarbonisation measures is essential.

These key issues are discussed in further detail in the appendix as part of our responses to the survey questions asked by EPA as part of the consultation.

Conclusion

The Draft Requirements are not fit-for-purpose and should not be adopted in their current form. We submit the EPA to reconsider, as its proposed approach does not meet the EPA’s stated underpinning principles and objectives. The Draft Requirements are not evidence-based and would create duplication, inefficiencies, and add to the regulatory burden of businesses in NSW, whilst also leading to potential increases in compliance costs.

Facilities that are covered by the Safeguard Mechanism should not be subject to additional state-based requirements as they are already making a meaningful contribution to NSW emissions reduction targets. Supporting a consistent approach to GHG regulation reduces the risk of unnecessary additional costs or unintended consequences (including, for example, inefficient emissions reduction, distortion of the ACCU market and provision of commercially sensitive information).

The proposed mitigation measures will not materially reduce net emissions at Safeguard facilities, but they may significantly increase the costs incurred by the facilities in meeting their Commonwealth obligations. This in turn may impact the competitiveness of the NSW coal industry.

It is unreasonable for a regulator to mandate technologies or methods that are not yet available at the necessary scale, particularly given the considerable uncertainty surrounding their timing, cost, and overall feasibility. If a significant portion of the industry is likely to need future exemptions to comply, this suggests a fundamental flaw in the design of the regulatory requirement.

We believe that feedback from the consultation process needs to be reflected in Draft Final Requirements which must also undergo consultation and impact analysis before they are implemented and used to inform licensees’ climate change mitigation requirements.

Appendix: Glencore Responses to EPA Survey Questions and Draft Consultation Documents

Glencore notes that the survey questions from the EPA (as listed on the consultation portal) are occasionally inconsistent with those presented in the consultation documents. Additionally, there are multiple, dispersed instances throughout the consultation documents where the EPA seeks feedback on various topics that are not addressed in the survey questions. Therefore, we are providing feedback on both the formal survey questions and the questions contained in the consultation questions below.

PART 1 - PROPOSED CLIMATE CHANGE LICENSEE REQUIREMENTS

1. What are your views on the EPA's proposed climate change requirements for existing licensees?

Glencore response:

We believe the requirements are not fit-for-purpose as they are duplicative, highly prescriptive, and not outcomes-focused. We further consider that the timeframes for implementing the prescriptive mitigation actions are highly optimistic and not evidence-based.

We note the EPA's statement (on page 8 of the *Proposed Climate Change Licensee Requirements*) that, "*The Safeguard Mechanism alone will not be enough to help NSW meet its emission reduction targets*". This statement from the EPA contradicts the NSW greenhouse gas emissions projections 2024: Methods Paper¹⁷, which depicts that the declining emissions from Safeguard facilities will be significantly lower than what the NSW Government forecasts in the "Current Policy" scenario underpinning the NSW targets (Figure 1). This figure also depicts that net emissions from coal are expected to reduce by ~50% by 2030, aligning with NSW's emissions reduction targets.

¹⁷ State Government of NSW Department of Climate Change, Energy, the Environment and Water. Net Zero Emissions Dashboard 2022-2050 and NSW greenhouse gas emissions projections 2024: methods paper, available at <https://www.seed.nsw.gov.au/net-zero-emissions-dashboard>

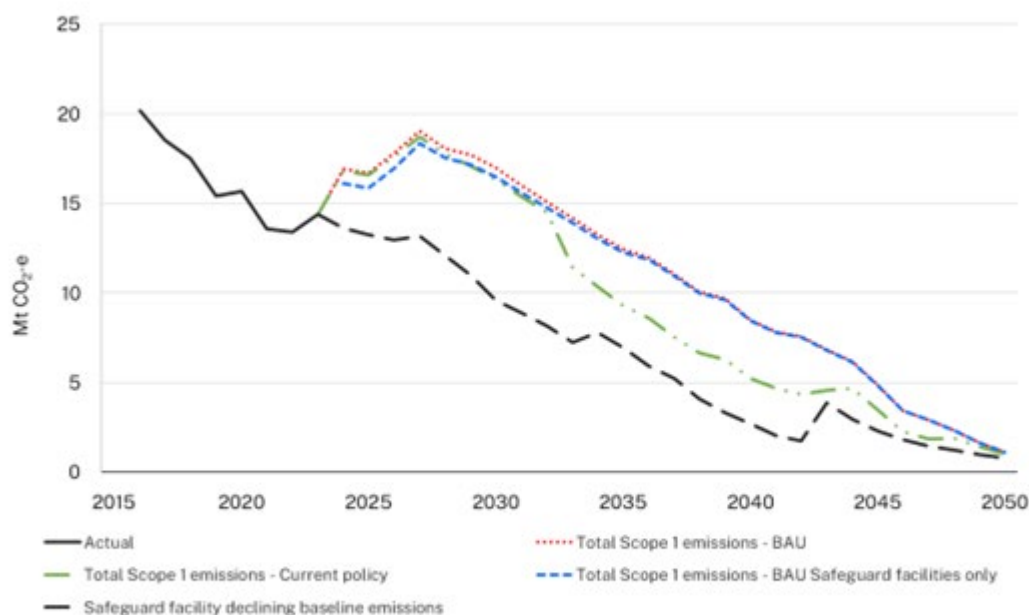


Figure 24 Scope 1 emissions for coal mining showing inventory estimates (1990 to 2022), scope 1 BAU and current policy emissions projections, scope 1 emissions for Safeguard coal mines only, and the Safeguard declining baseline for the coal mining sector (2023 to 2050)

Figure 1 Excerpt from NSW greenhouse gas emissions projections 2024: methods paper

We note the EPA’s statement (on page 12 of the *Proposed Climate Change Licensee Requirements*) that, “The methods used to report emissions to NGERS are based on estimates, and actual emissions can differ from these figures”, citing the Climate Change Authority’s (CCA) 2023 NGER Review. The EPA uses this statement to justify its inability to adopt an outcomes-based approach. However, these assertions do not accurately represent the CCA’s findings and the Australian Government’s response¹⁸ to Recommendation 17 which emphasised that Method 2 is the highest order IPCC method globally for estimating emissions from open cut operations. In its response, the Australian Government stated, “The current approach to emission estimation under Method 2 is equivalent to the highest (most sophisticated) IPCC method tier. Australia is currently the only country in the world to use methods of this tier to estimate fugitive methane and carbon dioxide emissions from both underground and open-cut coal mines...” and “To ensure the method remains fit for purpose and based on the best available science, technologies and practices, the government will review Method 2”.

We note that the EPA further states (on page 15 of the *Proposed Climate Change Licensee Requirements*) that, “Emission limit requirements on licences need to be informed by the NSW Government’s Regional Greenhouse Gas Monitoring Network and broader work across government” and, “Setting individual greenhouse gas emission limits on licence provides an outcomes-focused approach to driving emissions reductions. However, for the EPA to be able to effectively take action for breaches of limits, they need to be supported by accurate measurement of emissions, and determination of meaningful site-level limits.”

¹⁸ Australian Government, Australian Government response to the Climate Change Authority’s 2023 Review of the National Greenhouse and Energy Reporting legislation available at <https://www.dcceew.gov.au/sites/default/files/documents/government-response-cca-ngcr-review.pdf>

We reiterate the Australian Government's response to Recommendation 17 mentioned earlier and point out that the existing NGER methods have not been disproven. The Australian NDC's and NSW emissions reduction targets are all outcomes-based and supported by the existing NGER methods.

As such, it's highly unclear why the EPA claims that a network and emissions monitoring method, which currently does not exist and has significant uncertainty regarding its development and implementation as an NGER method, is necessary to inform future greenhouse gas limits.

We note that emerging, non-regulated methods have been used to challenge the integrity of NGER methods. However, these emerging methods have yet to be proven as fit-for-purpose in estimating coal mine emissions inventories in Australia or globally, mainly due to limitations such as poor temporal coverage, unreliable data, high uncertainty in estimated methane flow rates, and challenges in quantifying emissions in complex mine geometries.

For any methods to be considered as verification tools for NGER methods, they must address the above limitations and align with NGER principles. We note that the Australian Government has appointed an Expert Panel on Atmospheric Measurement of Fugitive Methane Emissions in Australia, an independent expert panel which will advise on top-down methods and whether these could be used to improve reporting under the NGERS and Australia's National Greenhouse Accounts. The Expert Panel is not due to provide its advice until mid-2027 and the EPA should be monitoring the work of the Expert Panel and the Commonwealth Government.

In addition, we note that Australia is a signatory to the Global Methane Pledge, and the Commonwealth Government will continue to implement measures to reduce methane emissions across the mining sector (as per the Resources Sector Plan).

Nevertheless, we support the efforts of the NSW Government in analysing the suitability of these emerging methods.

2. Are the EPA's proposed timeframes for annual emissions reporting and CCMAPs suitable in light of NGERS and Safeguard Mechanism reporting obligations?

Glencore response:

The proposed timeframes and reporting requirements are duplicative of existing NGER (and financial) reporting obligations, leading to inefficiency and re-work. They also contradict the EPA's own stated position in its Climate Change Action Plan 2023–26¹⁹, which asserts, *"We will ensure any emission limits or other licence requirements complement (and do not duplicate) NSW Government actions already taking place under the NSW Net Zero Plan, and any actions being taken by the Commonwealth Government (e.g. under the Safeguard Mechanism). Licensees will not be required to report the same information twice. We will also consider how to future-proof our approach, so that it recognises and allows for any future changes to Commonwealth policies or initiatives."*

¹⁹ NSW EPA, EPA Climate Change Action Plan 2023–26 (Jan 2023), available at <https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/climate-change/23p4265-climate-change-action-plan-2023-26.pdf>

The proposed reporting requirements **will** require licensees to report the same information twice. In addition, no other reporting standard requires this level of detail in climate-related financial disclosures.

Dispersed consultation question, page 14: Should underground coal mines in the Western Coalfields be required to continuously monitor methane concentrations from ventilation shafts for reporting purposes given the low methane content? Are there instances where this requirement would not be practical or feasible for specific underground mines?

Glencore response:

NGERs permits the use of either periodic or continuous monitoring methods, which the reporting entity must justify based on the observed variability of emissions, while ensuring that the data is representative and unbiased. Emissions reported using these methods are also subject to the assurance and audit requirements of the NGER Scheme.

The EPA's contemplated prohibition of approved NGER periodic methods is unwarranted. We observe that the current methane detection limits of continuous monitoring instruments are inadequate for the low levels of methane detected at our Ulan Coal Mine Complex. Such low concentrations can be accurately detected through gas chromatograph analysis which is periodic. In contrast, continuous monitoring methods (such as tube bundle or real-time analysers) lack the appropriate detection threshold for these low methane levels, and their implementation would compromise measurement accuracy.

PART 2 - CLIMATE CHANGE MITIGATION AND ADAPTATION PLANS (CCMAP): PROPOSED MITIGATION REQUIREMENTS

3. What are your views on the EPA's proposed mitigation requirements for licensee CCMAPs?

Glencore response:

- Provision of the latest financial year's data and Safeguard Baseline determinations in the CCMAP is duplicative as the facility would already be reporting this as part of NGERs (and most likely Annual Reviews related to the site's NSW planning approval).
- Provision of forward-looking information would reveal commercially sensitive information and expose businesses to heightened greenwashing risks. This is particularly the case in relation to the requirement to submit 10-year emissions projections (which are then made public) every three years.
- The evidence base provided by the EPA (Literature Review & Industry Scan, and Independent Expert Review Panel Report) for the proposed prescriptive mitigation requirements demonstrates that many of the requirements are either:
 - not available ("zero emission" vehicles),
 - not feasible due to unproven technological capability (VAM RTOs)
 - not feasible due to high cost or limited availability (low carbon fuels).

Consequently, the EPA has not provided sufficient evidence to adequately support the implementation of the proposed mitigation requirements, especially when its own reports (and listed references) highlight significant barriers and uncertainties regarding the timing and feasibility of these measures.

- The EPA has not provided criteria for assessing feasibility. It is essential for the EPA to define and outline criteria for feasibility, including financial feasibility, to ensure

certainty of outcomes for licensees. On page 16 of the *CCMAP Proposed Mitigation Requirements*, the EPA states, “It is not expected that reductions in emissions should be pursued ‘at any cost’. Nor does it mean that the preferred option will always be the lowest-cost option. However, it is important that the preferred option is cost-effective.” These statements do not provide clarity on how the EPA intends to assess feasibility.

- The requirement for emissions reduction goals based on absolute net emissions is inconsistent with the Safeguard Mechanism, which requires goals based on net emissions intensity.
- We note the EPA further states on page 18 of the *CCMAP Proposed Mitigation Requirements*, “We expect emissions reduction trajectories to be broadly consistent with the NSW or government developed industry specific emissions reduction trajectories. If the projected emissions trajectory does not align with the overall NSW net-zero emissions trajectory, the licensee must explain why the emission reduction trajectory still represents a meaningful contribution to NSW’s emission reduction targets and/or supports NSW to decarbonise”.

We observe that not all sectors will follow the same trajectory, as the Government’s targets are based on varying levels of emissions reduction across different sectors. The NSW emissions reduction targets are primarily driven by the timely phase-out of coal-fired generation, coupled with the expansion of firmed renewable energy generation and its associated transmission. The government should provide transparency regarding the NZEM trajectories at a sectoral level, allowing licensees to compare their trajectories with those relevant to their industry sector.

- Page 18 of the *CCMAP Proposed Mitigation Requirements* requires Scope 2 goals to be established.

We note that Scope 2 emissions are indirect and, by their nature, are not directly controlled by the licensee. We consider that it is inappropriate for grid-connected licensees to set Scope 2 goals due to their significant dependence on the grid’s emission factor, which is beyond their direct control. We also observe that most, if not all, licensees affected by the proposed requirements would be grid-connected. Consequently, they will contribute to the greening of the grid through their electricity costs.

- The EPA has not provided a regulatory impact analysis for the proposed mitigation requirements.

4. What additional assistance or resources do licensees need to assist them to compile a CCMAP?

Glencore response:

Glencore premises do not require additional assistance in compiling CCMAPs.

Dispersed consultation question, page 10: Can you suggest other existing plans similar to CCMAPs that the EPA could reference?

Glencore response:

We observe that the EPA's proposed approach of re-purposing other existing reports contradicts statements it has made in its Climate Change Action Plan 2023-26²⁰ that, *"Licensees will not be required to report the same information twice."* Proponents will be required to submit information on multiple platforms to multiple regulators, creating inefficiencies and increased compliance costs.

Dispersed consultation question, page 14: The EPA has heard from some licence holders that publishing 10-year emission estimates may reveal commercially sensitive information. Do you have any suggestions for how to meet the intent of this requirement without publishing commercially sensitive information?

Glencore response:

Glencore is extremely concerned about the requirement to submit 10-year emissions projections (which are then made public) every three years. Glencore is also concerned about the requirement for previous versions of CCMAPs to stay published. These requirements may lead to increased greenwashing perceptions and risk for proponents. We suggest that 10-year emissions projections should not be made public and are provided to the EPA separately to the CCMAPs if required for a legitimate purpose. The EPA's own analysis notes that no other reporting standard requires this level of detail in climate-related financial disclosures.

In addition, Glencore is concerned about the level of information required to be provided in relation to existing and planning mitigation measures and offset use. This will likely contain a range of commercially sensitive documentation and information and there is a risk that sensitive information relating to mitigation and offset strategies, and long-term offtakes could be made public. This could have negative implications for the integrity of the ACCU market by impacting upon supply and cost.

We consider that the EPA must implement the necessary regulatory and policy framework to allow proponents to designate and redact commercially sensitive information before such information is published. We note that this is an option available for proponents under NGERs to ensure that confidential information is protected.

We believe that the goal of obtaining input from EPL holders for forward-looking forecasts is already fulfilled through the consultative process employed by the NSW Net Zero Emissions Modelling Team when developing their annual estimates. Therefore, we do not think that licensees should be required to provide additional information to the EPA.

Dispersed consultation question, page 20: Is there any additional information that would help licensees create their CCMAPs?

Glencore response:

The draft requirements for CCMAPs must be reviewed to prevent duplication and double-reporting with existing reporting frameworks such as NGERs (and financial disclosures).

²⁰ NSW EPA, EPA Climate Change Action Plan 2023–26 (Jan 2023), available at <https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/climate-change/23p4265-climate-change-action-plan-2023-26.pdf>

PART 3 - PROPOSED GREENHOUSE GAS MITIGATION GUIDE FOR NSW COAL MINES

5. What are your views on the EPA's proposed greenhouse gas mitigation guide for NSW coal mines?

Glencore response:

- The Safeguard Mechanism fundamentally incentivises emissions reduction. By facilitating the avoidance of ACCU/SMC purchases and enabling SMC issuance, the Safeguard Mechanism creates ongoing economic pressure and opportunities to promote emissions reductions, regardless of whether a facility is operating above or below its baseline.
- The proposed timeframes for implementing VAM abatement technologies are inconsistent with (and more optimistic than) those set out in the Commonwealth Government's new Resources Sector Plan²¹. The Resources Sector Plan also recognises that there are concerns with VAM being "safely and efficiently deployed".
- Similarly, the Commonwealth's Transport & Infrastructure Sector Plan²² only contemplates demonstration of low carbon liquid fuels for heavy vehicles in the 2025-2030 period, with potential for wider scale rollout beyond 2030, where the mining sector would be competing with aviation and other sectors for a limited supply of renewable diesel.
- The EPA states (on page iv) that, "Greenhouse gas emissions from coal mines made up about 12% of NSW total emissions in 2021-22". Additionally, the Net Zero Emissions Model Methods paper indicates that almost all coal mine emissions are from Safeguard facilities (as per Figure 1). Together these aspects demonstrate the extent to which the coal sector is already incentivised to reduce emissions, without further prescriptive measures being applied.
- It's unclear what actions that EPA is taking to reduce emissions from other sectors that are larger contributors to NSW emissions that are not subject to the Safeguard Mechanism.
- The proposed mitigation measures are not outcomes-based and are duplicative for Safeguard facilities. The EPA has not provided evidence demonstrating how/if these mitigation measures would materially reduce net emissions, particularly at Safeguard facilities. Additionally, the proposed prescriptive mitigation measures are inconsistent with the Safeguard Mechanism, which permits the use of least-cost emissions reduction initiatives.
- The EPA has not provided evidence that the proposed mitigation measures would be technically or economically feasible, either at present or within the proposed timeframes.
- On the basis of the above, we believe that these prescriptive requirements should not apply at Safeguard facilities

²¹ Department of Industry, Science and Resources - Department of Climate Change, Energy, the Environment and Water (2025), Resources Sector Plan - September 2025, available at <https://www.industry.gov.au/publications/resources-sector-plan>

²² Department of Industry, Science and Resources - Department of Climate Change, Energy, the Environment and Water (2025), Transport and Infrastructure Net Zero Roadmap and Action Plan - September 2025, available at <https://www.infrastructure.gov.au/departments/media/publications/transport-and-infrastructure-net-zero-roadmap-and-action-plan>

- In relation to the proposed mitigation measures for underground coal mines (as outlined in Table 1 of the EPA paper):
 - The proposed mitigation measure relating to flaring of drainage gas is already common practice as identified in the EPA’s Industry Scan
 - The proposed mitigation measure relating to addressing methane leaks is already part of standard underground safety management practices (and also includes minimisation of carbon dioxide leaks)
 - The proposed mitigation measure relating to destroying VAM contradicts evidence referenced by the EPA (as per CSIRO²³) that due to lower VAM concentrations at Australian coal mines, the technical feasibility of VAM RTOs is unproven and requires longitudinal study. Furthermore, there is substantial evidence showing that the risk management of RTOs must be tailored to the Australian context to mitigate the potential consequence of multiple fatalities. It is unclear why the EPA is opting to enforce this as a prescriptive measure in light of such significant documented barriers.
 - In relation to VAM RTOs, the EPA suggests that such units would have a 2-year payback. This is very unlikely to apply universally, and the EPA has not provided any site-specific evidence to support this claim.
- In relation to the proposed mitigation measures for diesel emissions reductions (as outlined in Table 2 of the EPA paper):
 - The EPA’s reference to “zero emission vehicle” is misleading, as an electrified fleet is likely to have Scope 2 and 3 emissions associated with it.
 - The EPA states (on page 6) that, “*The EPA understands that there is capacity within the existing biofuel production facilities in NSW, Queensland, and Victoria to help meet the 2030 low carbon fuel target*”. However, the EPA has not provided evidence to support this assertion, nor has it demonstrated that a sufficient volume of cost-effective low carbon fuels can be sourced by the NSW coal industry to meet these requirements. Glencore observes that currently the most economical options (which are still cost-prohibitive) are imported palm or soy-based biofuels, which have ethical provenance challenges that need to be considered. Higher-grade renewable fuels are even more expensive and available in lower volumes. The range of levelised cost of carbon for such options are orders of magnitude higher than the current ACCU price, and the forecast Safeguard cost containment measure. As such biofuels do not currently appear to be cost-effective options for emissions reduction and, given increased demand expected from other sectors, may not be in the future either unless supply-side measures are addressed.
 - Based on industry feedback, there are currently few options available for decarbonising fleets through equipment, primarily due to the low Technology Readiness Level (TRL) and Commercial Readiness Index (CRI) of emerging fleet technologies. As a result, the timelines for their availability and associated costs are highly uncertain.
 - It’s unclear why the EPA is proposing to impose such requirements on a single sector, rather than considering the broader transport and aviation sectors.

²³ Regan et al (CSIRO) (2024), A techno-economic analysis of coal-mine fugitive-emission reduction strategies in Australia, available at <https://publications.csiro.au/publications/publication/Plcsiropublication/EP2024-5573>

- It's unclear how the EPA has considered the work being conducted by the Commonwealth on Low Carbon Liquid Fuels.
- It is unreasonable for a regulator to mandate technologies or methods that are not yet available at the necessary scale, particularly given the considerable uncertainty surrounding their timing, cost, and overall feasibility. If a significant portion of the industry is likely to need future exemptions to comply, this suggests a fundamental flaw in the design of the regulatory requirement.
- In relation to the ability to apply for exemptions / extensions:
 - The EPA has not established criteria for evaluating feasibility.
 - Furthermore, requiring feasibility studies to be submitted to a regulator is unreasonable, as these studies are likely to contain commercially sensitive information.
 - Additionally, mandating a pre-feasibility study is overly prescriptive and imposes a greater burden than what businesses typically undertake. For instance, businesses generally do not advance to higher levels of study unless the previous level has met investment criteria. In the case of biofuels, if a concept study reveals a lack of feasibility, there would be no motivation to proceed to a pre-feasibility study. Therefore, we recommend that the prescription for study levels be removed.

6. How soon can coal mines begin transitioning to low carbon alternatives to fossil diesel, and zero emissions large mining machinery?

Glencore response:

Glencore has previously provided feedback through the Industry Scan, that there are currently no feasible options for low carbon alternatives to fossil fuels, and that “zero emissions vehicles” options for large mining machinery are limited, with highly uncertain timeframes on large-scale rollouts and feasibility.

7. Do you have any views on requirements for scope 2 emissions for EPA licensees generally (not limited to coal mining)?

Glencore response:

- NSW coal mines are typically grid-connected, and therefore, their Scope 2 emissions are influenced by the greening of the grid.
- Due to this reliance on an externality, it is inappropriate to impose separate Scope 2 emissions reduction requirements on grid-connected licensees.
- NSW coal mines (along with other grid-connected licensees) will contribute to the greening of the grid through their electricity costs, as renewable energy generators, firming and storage providers, and transmission operators will seek to recoup the substantial capital investments required for the energy transition.
- In Box 3 of the Spot Electricity Market, we note that arrangements for advanced metering and load shifting are mentioned. It is unclear why a hypothetical, futuristic carbon accounting measure that does not currently exist has been emphasised.
- Additionally, we observe that the contracting approach, whether long-term or spot, does not influence emissions accounting under the location or market-based approach. For electricity sourced from the grid, Scope 2 emissions can only be reduced through the surrender of renewable energy certificates (such as LGCs), using the market-based carbon accounting method which currently does not reflect time-of-use.

- 8. Should the guide include expectations for coal mine companies to address any type of scope 3 emissions?**

Glencore response:

As Scope 3 emissions are outside the direct control of a licensee (but can be influenced by a licensee), it's not appropriate to require Scope 3 goals (unless volunteered by the licensee).

- 9. Do you have any suggestions to improve the robustness and transparency of the exemption application (pre-feasibility assessment) process, and to reduce compliance costs for licensees?**

Glencore response:

The EPA has not defined the criteria for assessing feasibility, which prevents us from answering this question. Feasibility requirements should be consulted on and established from the outset of the climate change licensee requirements. This will enable licensees to develop their own perspectives on when and if mitigation actions are feasible in the long term.

- 10. Should there be an avenue for public input into the exemptions process and, if so, how? Is the publication of CCMAPs and progress against CCMAPs sufficient to provide transparency?**

Glencore response:

The exemption process will typically require the consideration of techno-economic factors and is likely to contain commercially sensitive information. The public is unlikely to provide input that could inform such techno-economic assessments of mitigation feasibility, and as such we do not believe that public input is required into the exemptions process.

We believe the publication of CCMAPs is sufficient to provide transparency.

- 11. Do you consent to your feedback being published?**

Glencore response:

Yes

Dispersed Consultation question/statement, page 5: Gas drainage and destruction of methane is a relatively cost-effective and mature technology at NSW underground mines and should be a greenhouse gas mitigation action that can be implemented immediately at most underground coal mines. Gas drainage and destruction of methane could also be feasible at some surface mines. The EPA is seeking feedback on whether this requirement should apply to both underground and surface coal mines.

Glencore response:

We note that both the Industry Scan and the Expert Panel Review highlighted the challenges associated with gas drainage at open-cut mines, emphasising that such assessments are highly site-specific. Therefore, implementing a prescriptive approach for surface mines is not reasonable.

Dispersed Consultation question/statement, page 6: The EPA understands that there is capacity within the existing biofuel production facilities in NSW, Queensland and Victoria to help meet the 2030 low carbon fuel target. There is also capacity within the market for a smaller target, earlier. As a result, we seek views on whether the EPA should progress a requirement for 2.5% of fuel used at NSW coal mines to be a low carbon alternative to fossil diesel by 2027.

Glencore response:

The EPA has not provided evidence for the available biofuel volumes, nor their feasibility. As such, progressing prescriptive measures that are not evidence-based is unreasonable.

Dispersed Consultation question/statement, page 18: Some NSW surface mines are also considering modifications to mine deeper coal seams, which can contain higher methane gas contents. Gas drainage in these circumstances should be prioritised, and if this is not feasible, then the disturbance of the seam should be avoided.

Glencore response:

This statement is quite ambiguous. What is the definition of "*higher methane gas contents*", and what does the EPA mean when it states that that coal seams with "*higher methane gas contents*" should not be disturbed? Additionally, does this mean that underground mines with coal seams of "*higher methane gas content*" (either before or after gas drainage) should also not disturb such coal seams? We request that the EPA clarify its position on this issue.

Dispersed Consultation question/statement, page 21: In 2025, the EPA intends to introduce licence conditions that require coal mines to transition to non-road diesel equipment that meets US EPA Tier 4 final emissions standards as a minimum or better (for example zero emissions equipment) for all non-standby vehicles and equipment used on the surface of the facility. This is an outcome of the EPA's 2024 public consultation on the regulation of coal mines in NSW.

Glencore response:

As Tier 4 reforms are unrelated to GHG emissions, it's recommended that such reforms are consulted on separately by the EPA. Original Equipment Manufacturers (OEMs) utilised by Glencore have provided information that Tier 4 final equipment may limit the use of biofuels in certain engine categories, such as imposing blend limitations to either no biodiesel or up to a B7 ceiling. Consequently, the EPA must investigate such unintended consequences as part of its assessment of the costs and benefits associated with Tier 4 final engines.

Dispersed Consultation question/statement, page 30: For the large haul vehicles used in surface coal mining, there is future potential for on-board battery power to replace diesel power. Surface haul trucks need large batteries (1.5 to 1.6 megawatt hour [MWh] capacity) and cooling systems. Viable options are expected from 2030. The main barrier at this stage is cost (i.e. cost of batteries, cooling system, charging infrastructure and long downtime during charging, battery swapping stations).

Glencore response:

The EPA has not provided evidence for the statement that "*Viable options are expected from 2030*". It is Glencore's view that wide scale roll out of decarbonised fleet are unlikely till after 2035, and that timeframes (and costs) for the development and roll-out are uncertain due to the currently low TRLs of equipment.

Dispersed Consultation question/statement, page 21: Scope 1 emissions – diesel combustion.

Reducing fossil diesel use is an important measure needed to help bring forward emissions reductions at surface coal mines to support NSW's emissions reduction targets. In addition to the expectations set out in this guide, the EPA is considering whether it is feasible for surface mines to bring forward changes to fleet. For example, transitioning to low emissions vehicles in the 2030s. There may also be capacity within the biodiesel production market to support a mandate in the 2020s.

The EPA has heard that investing in operational expenditure is more financially feasible than large capital expenditure for coal mines given the remaining life span of the mines. Increasing low carbon fuel use is one option to help deliver that, however, the EPA's expert panel noted that the priority for renewable diesel may be for use in aviation and maritime activities where there are limited alternatives for electrification or low carbon fuels.

Q3.1 Should the EPA progress a regulatory requirement for 2.5% of fuel used at NSW coal mines to be a low carbon alternative to fossil diesel by 2027?

Q3.2 Can coal mines transition to low or zero emissions large mining machinery and low carbon alternatives to fossil diesel sooner?

Q3.3 What are the barriers and opportunities?

Glencore response:

- Question 3.1: Please refer to our response to the Dispersed Consultation question/statement, page 6
- Question 3.2: Please refer to our responses to Survey Question 5 and the Dispersed Consultation question/statement, page 30
- Question 3.3: Please refer to our responses to Survey Question 5 and the Dispersed Consultation question/statement, page 30

Dispersed Consultation question/statement, page 28: Scope 1 emissions – minor sources

The EPA's expert panel noted that these scope 1 sources are minor contributors to the emission profiles of coal mines and that there were limited opportunities to mitigate these sources.

Q4.1 Should the EPA have any requirements/expectations for coal mining companies about reducing minor sources of scope 1 emissions?

Glencore response:

- All Scope 1 sources at Safeguard facilities are subject to Safeguard, and as such do not require separate prescriptive mitigation
- In relation to Table 14, we observe that a range of hypothetical and unproven mitigation measures are listed such as:
 - Introducing microbial or biochemical agents to stabilise coal
 - Enclosing stockpiles with gas capture and flaringIt's unclear why the EPA has included hypothetical and unproven methods in the Draft Requirements.

Dispersed Consultation question/statement, page 33: Scope 2 emissions

The EPA's expert panel noted that more detailed guidance could be provided on the breadth of energy efficiency, energy management and demand response opportunities available to NSW

coal mines. The panel also noted that the RET is finishing in 2030, and that the EPA could consider expectations for the industry to purchase renewable electricity after this date.

Coal mining is only one of the industries that the EPA licenses which include large energy users. The EPA intends to consider scope 2 requirements across all large energy users in the future and will align with the decarbonisation of the electricity grid and potential increases in consumption due to electrification.

Q5.1 Do you have any suggestions about scope 2 requirements for EPA licensees to help inform our future work on scope 2 emissions?

Q5.2 How should the decarbonisation of the grid be considered, if EPA expectations for scope 2 are to be established?

Glencore response:

The Large-scale Renewable Energy Target (LRET) and its related LGC Scheme were designed to subsidise the development of new additional build of renewable energy, at a time when renewable energy was not considered to be cost-competitive. The scheme will end in 2030 because renewable energy is now deemed to be cost-effective in its own right and does not require subsidies. As such, the rationale for introducing a NSW-LRET-style obligation is unclear and contradicts the proposition that renewable energy is cost-effective.

Additionally, grid-connected coal mines will support the grid decarbonising through costs for generation and distribution that will be passed onto them as part of their electricity pricing. There is significant investment involved in both generation, storage, and distribution networks, the costs for which will need to be passed onto consumers.

Dispersed Consultation question/statement, page 36: Consultation question: Scope 3 emissions

The EPA's expert panel noted that by far the biggest source of scope 3 emissions is the end use of coal. All other scope 3 emissions are very minor by comparison. Including a section on (or specific EPA expectations) for scope 3 emissions without addressing the downstream use of the product could be challenging.

It is beyond the EPA's remit to include specific requirements or limitations on coal mines around the end use of coal. However, there could be opportunities for the mining sector to influence its supply chains to decarbonise. For example, an expectation that the coal mining industry uses green explosives may stimulate a market for these products. A disadvantage to this approach is that it may be inequitable to place these types of scope 3 mandates on coal mines ahead of other NSW industries.

Q6.1 Should the guide include expectations for coal mine companies to address certain scope 3 emissions? For example, an expectation that mines use green explosives?

Glencore response:

As Scope 3 emissions are outside the direct control of a licensee (but can be influenced by a licensee), it's not appropriate to require Scope 3 goals (unless volunteered by the licensee). The EPA has not provided evidence that green explosives are commercially available in the volumes that would be required and is cost-effective.

Dispersed Consultation question/statement, page 40: Consultation questions: Exemptions and time extensions

The EPA's expert panel noted that, if undertaken in good faith, requiring mining companies to undertake a pre-feasibility assessment is a practical way for companies to demonstrate to the EPA that they cannot implement a required mitigation measure.

Some advisory group members have suggested that mines that cannot technically implement the proposed mitigation requirement should not have to seek an exemption. The EPA is seeking views on whether the exemption framework should specify the scenarios in which mines will not need to seek exemptions. However, for this to occur, mines will still need to demonstrate, with evidence, why certain mitigation requirements are not feasible.

In terms of cost-effectiveness, the panel noted that access to funding is also an issue that mining companies may need to consider (i.e. how easy the mitigation measure may be to finance).

The EPA notes that the cost-effectiveness of mitigation measures can also be improved where there is opportunity to generate carbon credits or access government funding. For example, Safeguard Mechanism credits units (SMCs) offer opportunities for coal mining companies to monetise carbon reductions. The demand for SMCs and their price is also likely to increase over time. This will likely increase the cost-effectiveness of mitigation measures over time.

Some advisory group members suggested that an objective test for financial viability would be helpful for industry certainty, such as using the Commonwealth ACCU cost containment price as an upper limit on mitigation cost expectations. An alternative option would be to consider the NSW Treasury carbon values that NSW Government agencies must use when valuing the impact of carbon emissions in cost-benefit analysis. A cost-benefit analysis assesses the societal benefits and costs of emissions reduction actions and not the financial feasibility of mitigation actions for specific businesses.

Some advisory group members suggested that there needs to be an avenue for public input into any exemptions process to ensure its robustness and transparency.

Q7.1 Do you have any suggestions to improve the robustness and transparency of the pre-feasibility assessment process, and to reduce compliance costs for licensees?

Q7.2 Should the exemptions process outline the circumstances in which an exemption does not need to be sought on specific technical feasibility grounds?

Q7.3 Any exemptions issued by the EPA would be made public. Should any of the information in the pre-feasibility assessment be made public?

Q7.4 Should there be an avenue for public input into the exemptions process and, if so, how? Is the publication of CCMAPs and progress against CCMAPs sufficient to provide transparency?

Q7.5 Could grounds for an exemption include reducing the equivalent level of scope 1 and 2 emissions on site?

Glencore response:

The NSW Carbon Values Report²⁴ defines NSW Carbon Values as, "NSW Carbon Values refer to annual values (\$/tCO₂-e) that are required to incentivise the deployment of the modelled decarbonisation technologies to achieve the NSW's currently legislated FY30, FY35 and FY50 decarbonisation targets. Three sets of NSW Carbon Values (High, Central, Low) have been

²⁴ NSW Government, prepared by Deloitte Touche Tohmatsu (2024), available at <https://www.nsw.gov.au/sites/default/files/noindex/2025-03/nsw-carbon-values-report.pdf>

considered against differing volumes of abatement, speed of deployment and cost-effectiveness of decarbonisation solutions.”

The report is based on very high-level analyses on the financial feasibility of mitigation actions based on broad data which is not site/business specific. As such it is not fit-for-purpose to inform decision-making on site-specific abatement activities.

Furthermore, the NSW Carbon Values Report contradicts some of the EPA's proposed mitigation strategies; for instance, the Report states that VAM abatement has *“Medium viability given VAM is only at the pilot phase and would only be ready for commercial deployment in the coming decades”* and does not recognise biofuels or low carbon fuels as short-listed options. Additionally, the report relies on outdated studies to assess its VAM abatement potential and appears to have relied on costs associated with on-road electric vehicles to estimate the costs for mining fleet electrification. Therefore, the EPA's suggestion that the NSW Carbon Values should inform corporate investment decisions for coal-mine specific abatement contradicts the limitations and findings presented in the report.

- Questions 7.1, 7.2, and 7.3: Please refer to our responses to Survey Question 9
- Question 7.4: Please refer to our response to Survey Question 10
- Question 7.5: An outcomes-based approach is the preferred and efficient option to trade-offs between prescriptive mitigation actions.