



Submission to the Climate Change Authority (CCA)

Fossil methane: A near-term abatement opportunity

Friday 7 August 2026

Introduction

The Investor Group on Climate Change (IGCC) welcomes the opportunity to respond to the Fossil Methane consultation paper and questions issued by the Australian Climate Change Authority (CCA).

IGCC is a collaboration of Australian and New Zealand institutional investors focused on the impact of climate change on investments. IGCC represents investors with over A\$4.6 trillion in funds under management in Australia and New Zealand. IGCC's members are the custodians of the retirement savings of more than 15.8 million Australians and millions more New Zealanders.

Relevant framing

Investors have a fiduciary duty, mandated by law, to generate returns for their beneficiaries, and are assessed against benchmarks that require a certain level of fund performance. Investors rely on reported emissions data to provide an accurate picture of companies' emissions and transition risk, to assess current and prospective investments, and risks to asset values.

This reliance is compromised if reported methane emissions do not adequately reflect their contribution to climate change.

IGCC member organisations acknowledge methane's acute near-term potency and its significant role in accelerating global warming. More transparent reporting of this potency is needed to better reveal the climate effects of activities and strengthen market understanding of the risks and opportunities embedded in the real economy, so that more finance can be deployed in pursuit of near-term decarbonisation.

Institutional investors are already facing the accelerating consequences of a physically changing climate. Investors therefore have a strong interest in measures that slow the acceleration of climate change. The science is clear that decisive action on methane emissions is essential to slowing the rate of warming.

IGCC acknowledges the Traditional Custodians of Country throughout Australia and the continuing connections to land, sea and community.

We pay our respects to Elders past and present.

Summary and Recommendations

IGCC members have a strong interest in actions that position Australia competitively for international trade into the future, improve the emissions information they rely on for making investment decisions, and support abatement that is proportionate to accompanying climate impacts and risks. We therefore call for an urgent policy response to methane that strengthens Australia's international standing, brings methane's climate effects into sharper focus, and accelerates real reductions this decade.

Substantial methane reductions are achievable this decade, building from existing technologies and engineering solutions, particularly in the gas and coal sectors. It is essential to bring forward and scale investment in on-site solutions that capture, treat and avoid the wastage of methane, while work continues in parallel to improve the completeness of methane measurement and observation at each site.

Australia already has national emissions reduction targets, the architecture for six sector emissions reduction plans, and a commitment, consistent with COP30 "Global Mutirão" commitment 7, "to limit both the magnitude and the duration of any temperature overshoot"¹. The foundations for action on methane and other superpollutants are therefore already in place.

A small set of readily implemented policies and simple structures is now urgently needed to convert those commitments into progress:

1. **The Australian Government should strengthen methane disclosure so that methane's near-term potency is made explicit in emissions reporting and investment analysis.** IGCC calls for dual conversion of methane volumes reported under the NGER scheme, showing carbon dioxide equivalent values using both 100-year and 20-year Global Warming Potential (GWP) values. This simple addition to the display of methane emissions would improve transparency and decision-making while retaining existing 100-year values for inventory and Safeguard Mechanism liability purposes, retaining important emphasis of parallel carbon dioxide abatement.

Dual GWP conversion would not shift policy out of step with corporate practice. Rather, it would provide much needed clarity on the appropriate conversion factors consistent with emerging global norms and anticipated updates to the GHG Protocol.
2. **The Safeguard Mechanism Review should lead to reforms that support more and earlier on-site abatement.** While the Safeguard Mechanism is extremely important for domestic decarbonisation and encompasses facility methane, IGCC notes that it will not on its own deliver methane abatement at a level

¹ Decision 1/CMA.7 'Global Mutirão: Uniting humanity in a global mobilization against climate change', COP30 (Conference of the Parties serving as the meeting of the Parties to the Paris Agreement), UNFCCC/PA/CMA/2025/19/Add.1, distributed March 2026, p. 4.

proportionate to methane's climate impact. Safeguard Mechanism reforms must therefore be complemented by additional measures.

3. **Australia should create a stronger deployment ecosystem for industrial methane abatement projects.** This ecosystem requires policies to:
 - Address governance weakness, through the appointment of a responsible Australian Government department or agency to lead coordination with state authorities,
 - Lift joint problem solving for abatement project deployment, through a key convening and orchestration role and practical support for projects and collaboration between operators, solution providers, safety regulators and permitting bodies, and
 - Ease the cost-to-revenue timing mismatch for draining and design work undertaken in advance.
4. **Australia should strengthen its international standing and competitiveness through active and senior level contributions to international methane efforts.** Australia has a defining opportunity to step into leadership of international efforts on methane. Trading partners from the EU to China are moving to reduce methane emissions and have sent clear demand signals that the methane associated with Australia's fossil fuel exports should be addressed. Incentives that encourage company participation in standard-setting frameworks such as the UN's Oil and Gas Methane Partnership 2.0 and the Steel Methane Programme will strengthen Australia's export competitiveness and could reduce future compliance burdens, including by supporting access to derogations under the EU's Methane Regulation.
5. **Australia should action three further enablers:**
Enable changes to make full use of pre-existing Australian Carbon Credit Unit (ACCU) scheme settings, increase monitoring independence and domestic site responsiveness to UN Methane Alert and Response System (MARS) notifications, and address methane leaking from abandoned mines and wellheads.

Given Australia's economic reliance on fossil fuels, action on methane is both necessary and in the national interest. Focus on methane emissions will continue to grow, driven by advances in monitoring and widening recognition of methane's climate potency. IGCC members underscore that active methane abatement is critically important and should be treated as a practical and immediate priority.

An opportunity exists to strengthen the sector emissions reduction plans, building in methane targets to guide interventions. The adoption of public targets, while beneficial for collective efforts, should be understood as less pressing than the implementation of measures to drive on site active abatement. IGCC members look forward to a policy response that supports private actors to deliver advancements in methane capability and abatement in the industries in focus.

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Consultation question on accounting for the near-term climate benefits of methane abatement

10. Australia's emissions accounting and reporting calculate methane emissions on a 100-year global warming potential (GWP-100) basis. Without changing that approach, should policy or investment decisions give more weight to the near-term climate benefits of methane abatement? How?

There is growing awareness across the economy of methane's near-term potency and how its atmospheric life differs from that of carbon dioxide. There is approximately 2.7 times more methane in the atmosphere today than during pre-industrial times², accelerating anthropogenic climate change and bringing forward the effects of the physically changing climate.

It is essential that more is done to significantly reduce methane emissions. IGCC stresses that this work is needed irrespective of how methane is reported. However, the way methane emissions are presented is not unrelated to the level of abatement that can be achieved. If methane's potency is made explicit in the presentation of reported volumes, it will bring focus and funding to mitigation efforts.

Efforts to reduce methane should be made in proportion to methane's near-term potency, without reducing efforts to address carbon dioxide emissions which only degrade in the atmosphere over hundreds to thousands of years and therefore accumulate. The different shape in methane's potency justifies a parallel and complementary focus on methane emissions, supported by targets and policies that address current barriers to action.

At the same time as boosting explicit engagement with methane in its own right, it is essential to equip investors, those within companies allocating capital, and policy makers with visibility of methane's potency in simplified terms. IGCC believes that this is best achieved by displaying methane volumes, where methane is converted into carbon dioxide equivalence, on a dual basis, produced by multiplying the raw tonnes emitted by both short-term and long-term GWPs.

Use of a 100-year GWP is well established as the basis for long-term impact conversion. It establishes an effective exchange rate between methane and carbon dioxide abatement that works to bend the curve in cumulative warming caused primarily by carbon dioxide, and for now it forms the basis of global greenhouse gas inventory systems, domestic NGER scheme reporting and the Safeguard liabilities calculated from reported emissions. It is appropriate that this metric remains in place while global bodies consider any future changes to conversion practices.

As a second, complementary metric, we suggest that the Australian Government should implement a requirement for methane to also be displayed using a 20-year GWP

² IEA, 'Global Methane Tracker 2026', 4 May 2026.

in NGER and associated reporting. This would require the simple addition of a second display factor.

Methane's near-term potency, highly concentrated within 12 years of release to the atmosphere, is most pragmatically reflected in the use of a 20-year atmospheric life GWP for conversion to carbon dioxide equivalence. The near-term implications of leaked fossil methane, approximated using this 20-year GWP, is relevant to climate risks and abatement opportunities across our member's various investment portfolios.

Investment in greenhouse gas abatement must balance the near-term potency of methane, and the corresponding importance of accelerating methane abatement, with the cumulative damage of carbon dioxide, and the need to retain sufficient focus on carbon dioxide abatement over time. Investment in abatement that balances these risks should usually be made with reference to both a 20-year and a 100-year GWP.

For this to occur, it is essential that dual reporting of methane conversion be implemented for methane compliance reporting within Australia. It is not suggested that the 20-year GWP value be used as the basis for calculating Safeguard Mechanism facility liabilities but rather that it should be published as a complementary transparency measure. Implementation would require a minor revision to NGER scheme reporting to show methane emissions and total facility and company emissions reflecting both the 100-year GWP (AR6: 29 times CO₂) and the 20-year GWP (AR6: 82.5 times CO₂ for fossil methane, and 80.8 times CO₂ for biogenic / non-fossil methane).

The implementation of Government-backed dual reporting would allow Australia to keep pace with strengthening global expectations:

- The GHG Protocol, which provides the backbone for global emissions accounting, confirmed on 29 July this year, that the scope of work for the Corporate Standard Technical Working Group will “Revisit the 100-year GWP as the only required metric and consider additionally a 20-year GWP, particularly for short-lived GHGs such as methane”³. This foreshadows a shift in global expectations and a high likelihood of dual GWP reporting being mandated for company disclosures.
- The EU Methane Regulation (EU) 2024/1787 recital 9 states that “A 20-year and a 100-year time horizon for global warming potential should be used.”
- Analysis platforms are set up to facilitate analysis on the basis of a 20-year and 100-year GWP, including the IEA's Global Methane Tracker and the Sustainability Indicator Management & Analysis Platform⁴.
- Some companies, including Woodside, already apply GWP-20 to internal investment decisions and investors increasingly seek out dual conversion as good practice.

³ <https://ghgprotocol.org/sites/default/files/2026-07/Consolidated-StandardDevelopmentPlan%28SDP%29-2026.07.29.pdf>

⁴ <https://unhsimap.org/cmap/resources/gwp-versions>

We acknowledge that Australia's National Greenhouse emissions inventories, as published consistent with UNFCCC/Paris Agreement rules, map to Nationally Determined Contributions and international reporting rules that, for now, convert methane to carbon dioxide using only the 100-year GWP. This underscores the need for both GWP conversion metrics to be required in concert.

A further reason to place emphasis on near-term fossil methane abatement is the detrimental effect of methane on air quality by precipitating the production of ground-level ozone, which is a known respiratory system irritant.

The United Nations Environment Programme describes that "In the troposphere, methane plays an important role in regulating both the oxidation capacity as a whole and the amount of ozone in particular. Methane's primary sink is oxidation through the hydroxyl radical. When nitrogen oxides and sunlight are present, this oxidation process leads to the production of ozone"⁵.

Consistent with this process "every million tonnes of methane reduced prevents approximately 1,430 annual premature deaths due to ozone globally"⁶.

Consultation question on further policies and measures

8. What practical policies and measures could drive more fossil methane abatement than existing policy settings would deliver? How would these interact with the Safeguard Mechanism, and how should those interactions be managed?

Australia already has national emissions reduction targets, the architecture for six measurable sector emissions reduction plans, and a commitment, consistent with COP30 'Global Mutirão' commitment 7, "to limit both the magnitude and the duration of any temperature overshoot"⁷. The foundations for targeted action to reduce superpollutants including methane are in place.

A small set of readily implemented policies and simple structures are now urgently needed to convert these keystone commitments into progress.

For completeness, the first policy recommendation listed here returns to the central thesis of IGCC's response to Question 10, which underscores the importance of compelling reporting that makes methane's near-term potency more explicit. The second policy recommendation stresses the importance of the Safeguard Mechanism Review and need for strengthened on-site abatement.

While important, the revisions to Safeguard rules will be insufficient to deliver proportionate methane abatement. IGCC therefore sets out simple and

⁵ United Nations Environment Programme, 'Global Methane Assessment: Benefits and Costs of Mitigating Methane Emissions', 2021, over 200 mentions starting p.8.

⁶ *Ibid.*,

⁷ *Op. Cit.*, Global Mutirão

complementary policy measures commended to the CCA to increase delivered methane abatement.

1. NGER change to make methane's near-term potency visible

As noted under Question 10, methane's outsized contribution to near-term global warming is not visible in reporting built from conversion to carbon dioxide equivalence using a 100-year atmospheric life conversion factor (GWP). This degrades the visibility of risks and opportunities and weakens investment decision-making and near-term decarbonisation.

It is essential that governments, investors, operating companies and observers can access transparent data that presents methane emissions converted using both a 100-year GWP and a 20-year GWP. Both conversion factors are needed to inform both the long-term decarbonisation required to limit accumulating atmospheric carbon dioxide and to slow the near-term deterioration of the physically changing climate.

With growing levels of transparency from satellites, drones and company disclosures, methane emissions are becoming more visible to analysts and observers. Companies have climate-related risks that correspond to this increasingly visible subset of greenhouse gas emissions. Government-backed reporting that requires and presents methane emissions under both a 20-year and a 100-year GWP is consistent with the reality of these pre-existing facility and company climate-related risks.

For this to occur, it is important that dual reporting of methane conversion be implemented within Australia. This would require a minor revision to allow NGER scheme reporting to show methane emissions and total facility and company emissions converted using both the 100-year GWP (AR6: 29 times CO₂) and the 20-year GWP (AR6: 82.5 times CO₂ for fossil methane, and 80.8 times CO₂ for biogenic / non-fossil methane).

IGCC reiterates that dual conversion and display of methane emissions on the basis of a 20-year GWP does not increase the direct liability of Safeguard-covered facilities, as the Clean Energy Regulator can continue to apply the 100-year GWP value. We acknowledge that Australia's National Greenhouse emissions inventories, as published consistent with UNFCCC/Paris Agreement rules, map to Nationally Determined Contributions and international reporting rules that, for now, convert methane to carbon dioxide using only the 100-year GWP. This does not diminish the need for domestic dual reporting.

2. Measures to strengthen the Safeguard Mechanism:

The Safeguard Mechanism is of central importance to domestic decarbonisation. IGCC is currently working with its members to provide focussed feedback to Government on Safeguard Mechanism reform measures that warrant policy support. In support of this work, IGCC has commissioned modelling from EY on reform options and looks forward to providing more specific feedback from our findings.

IGCC is working to provide recommendations on the evolution of the Safeguard Mechanism, aligned to:

- Delivering more and earlier on-site abatement
- Achieving whole of economy least-cost compliance for decarbonisation, and
- Expanding carbon signals across more of the economy.

As reported in the CCA's consultation paper, around 75% of Australia's fossil methane is emitted at facilities covered by the Safeguard Mechanism. It is therefore critical that the Safeguard Mechanism plays a constructive role in deeper and wider methane mitigation following the review and that the outlook is one of policy continuity.

While recognising that the Safeguard Mechanism has a continuing and important role, IGCC highlights that Safeguard facility methane emission liabilities are calculated using a 100-year GWP that does not value methane's acute near-term significance. As a result, the Safeguard Mechanism may not deliver fully proportionate methane abatement investment. IGCC suggests that complementary measures will be essential.

3. Create a stronger deployment ecosystem for industrial methane abatement projects

3a. Policies to address governance weakness:

IGCC's membership includes Australia's largest, most sophisticated institutional investors, with stewardship and good governance at the heart of members' skillsets. Our members understand the importance of having in place clear and cascading accountabilities.

We note that no single division of the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW) is charged with overseeing methane abatement. The National Inventory Systems and International Reporting branch has carriage of methane monitoring and reporting rules and reviews but does not appear to extend its focus to mitigation efforts. IGCC suggests that accountability for methane reduction be established and appropriately resourced within the Australian Government.

Consistent with there being no branch or division of the Australian Government assigned to oversee policy measures and efforts relating to methane, there are no agencies or Australian Specialist Investment Vehicles (SIV) leading company-facing outreach at the Commonwealth level, nor the engagement with state-level safety and permitting regulators needed to accelerate the deployment of fossil methane reduction solutions.

The absence of this learning and deployment ecosystem is a significant barrier to fossil methane abatement, noted in IGCC's response to Question 5, in which we stress the importance of a central body leading collaboration and joint problem solving across facility operators, solution / technology proponents and safety regulators.

IGCC observes an important opportunity for a government body, potentially directed by DISR and instigated by ministerial direction, to bridge this gap.

This work is outside the renewable energy mandate of ARENA and is likely excluded under both the Future Made in Australia Act 2024, section 10A and the Export Finance and Insurance Corporation Act 1991, section 23C, limiting the sections of government able to take it forward and underscoring the need for ministerial direction. It is nonetheless a barrier to the uptake of superpollutant abatement solutions and should be resolved by the appointment of a department or agency taking forward this responsibility.

3b. Policies to lift joint problem solving for abatement project deployment:

As noted immediately above and under question 5, solutions that target methane abatement on industrial sites can be accompanied by upfront technical and regulatory complexity and a need to solve for perceived and actual safety and engineering constraints.

Here, collaboration and joint problem resolution are essential to the uptake of available solutions at scale, and to the improvement of measurement and response over time. Iterative discovery is needed to incorporate improving technology, to learn the ways in which solutions can be adapted for different sites, and ultimately to take good practice from one site to many.

There is not currently sufficient support for the learning and joint problem-solving ecosystem, the requisite studies, nor the sharing of best practice. Progress requires the facilitation of collaboration across facility operators, safety regulators and permitting bodies, and solution / technology proponents, and requires that all parties are compelled to collaborate to bring forward new adaptations and solutions.

As contemplated above, an important contribution to this delivery-focussed capability could be made by tasking an Australian Government Department, agency or SIV to facilitate deployment-focussed operational learning, building on elements of the example provided by ARENA and adding some further dimensions.

The success of a learning ecosystem rests in part on a nominated national government agency taking up a funded coordination role, bringing together those able to jointly solve engineering and safety constraints and incorporate the latest technologies to deliver on-site methane solutions, and to build insights and capability over a multi-year horizon.

Cornerstone elements of ARENA's playbook with relevance here include:

- Insights forums that convene knowledge holders and actors in settings where they are able to collaborate,
- Commissioning of targeted technical and civil society studies, and
- A requirement that Knowledge Sharing Reports are published for each abatement project.

The state-level regulators responsible for safety and approvals for ground disturbance and construction are not yet particularly incentivised to jointly resolve initial impediments or to streamline approvals for methane abatement projects, particularly with regard to coal. The appointment of a central department or agency to be charged with regulatory uplift would release this handbrake and benefit wider deployment. Explicit efforts are needed to clarify the importance of methane abatement, to build and share knowledge across the relevant regulator ecosystem and to ensure that clear and straightforward regulatory processes are defined for prospective methane abatement technologies, with an initial focus on ventilation air methane abatement.

The availability of grants and concessional debt for fossil methane abatement pilots and scale-up projects is not straight forward. While there is no desire to see subsidised fossil fuel investment, legitimate investment to address fossil methane is needed and Powering the Regions funding has previously been made available to this end, noting that the Resources Methane Abatement Fund is now closed. It may be possible to provide modest packages of funding within very specific constraints targeting the pilot and deployment of solutions across multiple sites where those sites have continuing operational lives. This continuing outlook would be likely to exclude thermal coal facilities.

In this context, the department or agency charged with accelerating methane project delivery should proactively identify and prioritise actors and sites with the greatest emissions and corresponding abatement potential. In this way, focussed efforts should be planned and delivered with firm mapping to the relevant sector's emissions reduction plans.

IGCC notes the Australian Government's preexisting commitment to work with state governments and resource sector participants to support funding and collaboration on methane abatement as it is phased in. The nominated department or agency should therefore lead collaboration and coordination with other state-based funding mechanisms, for example Low Emissions Investment Partnership (LEIP) in Queensland and any funding offered to support NSW Climate Change Licence requirements, including under the NSW Coal Innovation (CINSW) fund.

Funding could potentially be supported by Commonwealth Government production and receipt of Safeguard Mechanism Credits, subject to scheme tweaks, with more on this potential considered under the item below addressing the cost-to-revenue timing mismatch.

3c. Policies to ease the cost-to-revenue timing mismatch for draining and design work undertaken in advance:

Some methane reduction work, such as pre-drainage of new coal fields, takes place in advance of the extraction of the saleable resource, and can lag around five years behind the monetisation of that resource, whether by demand-side premia or through possible future certificate revenues.

Open cut coal mine methane abatement is particularly and adversely impacted by this mismatch. Pre-drainage of methane prior to area mining is the only proven methane reduction lever and it receives inadequate emphasis. High-quality pre-drainage for open-cut coal mines can be costly and takes considerable time, in the order of three years. It also draws on gas processing and marketing skills that are not typically resident within a coal mining business and is accompanied by considerable expense and project management overhead. Yet there is very little to compel pre-drainage and the implementation of best practice.

In this context, it may be useful to co-design and implement a set of clear regulatory signals of minimum requirements, such as requiring a given length of time for pre-drainage prior to the commencement of open cut mining.

In addition, we believe that there will be value in exploration of cost-sharing and other additions to the incentive environment. With corresponding tweaks to Safeguard Mechanism rules, it may be possible for the Australian Government to partially co-fund the pre-drainage of open-cut coal site areas before they are actively mined and to receive corresponding Safeguard Mechanism Credits as compensation for the abatement achieved. Such a change would allow the Government to recover costs, and participate in Safeguard Mechanism Credit market upside. Such a change could be used to fund pre-drainage over a longer time period, subject to regulatory guardrails, and with greater methane extraction than private actors otherwise fund. It could also in theory be extended to other pre-production design elements and accompanying costs.

4. Policies to strengthen Australia's international standing and competitiveness:

Jurisdictions across the globe are strengthening demand signals for methane mitigation efforts in fossil fuel supply chains. Aligning with these signals will strengthen the long-term competitiveness of Australia's commodity exports, noting in particular commodity destination markets in Asia and Europe.

IGCC therefore calls for the Australian Government to commit senior and visible leadership into key international forums and points of collaboration relevant to methane.

The most immediate priority for international representation is COP31, to be hosted in Türkiye this November with Australia serving as President of Negotiations. IGCC calls for Australia's representatives to advocate for the Waste work stream and agenda at COP31 to be defined to specifically encompass and prioritise engagement and efforts on methane released from human activity.

In parallel, IGCC members call for the Australian Government to prioritise policies that have the effect of encouraging fossil resource companies to become members of OGMP 2.0 for gas and oil producers and the UN's Steel Methane Programme for metallurgical coal.

Growing the participation of Australian producers in these frameworks will strengthen Australia's commodity exports and build Australia's long-term competitiveness.

OGMP 2.0:

The UN Environment Programme's Oil and Gas Methane Partnership 2.0 (OGMP 2.0) framework has been very effective in driving improvement in methane reporting accuracy for participating gas and oil companies. Of note, the framework 'ratchets' up increasing measurement accuracy, with level 5 requiring the calibration of point source monitoring with site-level aerial observations. It is this triangulation of more than one data set that picks up unexpected leakage and improves volumetric accuracy. OGMP 2.0 currently has 158 member companies. 50% of US production is OGMP-aligned, 90% of EU production and 42% of global production overall.

Steel Methane Programme:

While less mature, the UN's Steel Methane Programme (SMP) promises metallurgical coal miners a similar approach that builds to the inclusion of aerial (satellite, light aircraft and drone) observation for triangulation. The initiative aims to improve methane transparency, support robust measurement and verification, encourage mitigation, and clarify emerging best practice. It provides a platform for constructive collaboration, data sharing where appropriate, and the development of practical mitigation pathways.

It would be appropriate for the Government to demonstrate to coal and gas producing companies that membership of OGMP 2.0 and SMP is desirable.

More pointedly, a requirement for gas and coal companies to participate in OGMP 2.0 and SMP, respectively, would allow Australia to receive derogations under the EU's Methane Regulation to support the importation of products into Europe, a significant market for Australian metallurgical coal and a standard setter.

One way of providing an incentive for oil and gas company OGMP 2.0 membership relates to the Government's proposed domestic gas reservation rules, which would require all LNG exporters to set aside an amount equivalent to 20% of their exported product for the domestic market from 1 July 2027. The proposal highlights an "opportunity to export surplus gas in instances of oversupply". This opportunity could be available only to companies that are aligned to and meeting OGMP 2.0.

We would welcome the exploration of Government incentives for metallurgical coal miner participation in the SMP and Australian Government support for the evolution of SMP Monitoring, Reporting and Validation settings that work effectively under Australian conditions, and expand coverage to thermal coal.

5. Complementary policies

5a. Policies to make use of pre-existing ACCU scheme opportunities:

DCCEEW already facilitates the development of new ACCU methods for implementation through DCCEEW's Emissions Reduction Assurance Committee. While method development can take years, this ACCU method architecture allows for future innovation in methane-relevant ACCU methods that could potentially contribute remuneration for methane abatement.

IGCC would not wish to shutter the potential for ACCU method development for parties motivated to drive it, however ACCU revenue can take well over five years to flow and fossil-related ACCUs can be particularly difficult to market. We therefore place less emphasis on this pathway to methane abatement.

A small tweak to existing policy may enable somewhat greater use of this pathway, if it is possible to unlock independent third party ACCU generation and in so doing provide a financial incentive for those solution proponents to support deployment of methane abatement technology on mine sites that they do not own or operate. Current Safeguard liabilities are attached to the facility owner, which prevents solution proponents from recovering their costs from ACCUs at another party's facility, constraining innovations in financing. Policies could be enhanced to provide flexibility to repay investments by transferring ACCU entitlements.

5b. Policies to build confidence and transparency relating to on-site methane reporting:

Unexpected methane leaks can be particularly difficult to identify, can have significant climate and economic consequences, and can erode trust.

The audit of reported emissions tends to focus on method verification rather than independent technical peer-review, undertaken by experts engaged from outside the reporting entity. It may be beneficial to deploy a complementary technical audit step for self-reporters in certain industries that require skill and judgement in the placement of monitoring devices, bores and sensors. The inclusion of engineering and technology expertise, over time, can harmonise the standard at which monitoring and reporting is completed and may help companies keep pace with evolving technologies.

Further, in support of identifying and addressing methane leaks sooner, IGCC recommends a national commitment to respond to methane alerts issued through the UNEP Methane Alert and Response System within a defined period, potentially within one day in the first instance.

5c. Policies to improve abandoned mine and wellhead emissions accuracy and fund their capping:

IGCC supports in principle the implementation of an Australian Government fund charged with monitoring and validating the abandoned mine and wellhead emissions reported by Commonwealth states, and funding to support closure of abandoned and closed sites that continue to leak. Leaked emissions contribute to accelerating deterioration of the physical climate and the risk profile of sovereign investments.

Consultation question on targets or goals

9. Should Australia set specific targets or goals for reductions in fossil methane emissions or the uptake of fossil methane abatement opportunities? What are the benefits and risks?

We note that the Australian Government has a set of pre-existing emissions reduction commitments that have the combined effect of requiring action on methane and other superpollutants with near-term potency:

- COP30 consensus text ‘Global Mutirão’ commitment 7, whereby Australia as a signatory “reiterates its resolve to pursue efforts to limit the temperature increase to 1.5 °C, to limit both the magnitude and the duration of any temperature overshoot”⁸.
 - For the magnitude and duration of temperature overshoot to be limited, there must be corresponding and immediate action to reduce the release of methane and other superpollutants with near-term potency.
- Australia has set greenhouse gas emissions reduction targets (NDCs) of 43% below 2005 levels by 2030, 62-70% below 2005 levels by 2035, and net zero by 2050.
 - For these targets, superpollutants with near-term potency are converted to carbon dioxide using a 100-year GWP, with methane comprising around 28% of Australia’s annual emissions on this basis and eligible for corresponding priority.
- Australia is also a signatory of the Global Methane Pledge, through which “The Participants in the Global Methane Pledge: Commit to work together in order to collectively reduce global anthropogenic methane emissions across all sectors by at least 30 percent below 2020 levels by 2030”⁹. While this is a non-binding pledge, it sets out an expected level of ambition and anticipates a corresponding level of international cooperation.

⁸ *Op. Cit.*, Global Mutirão

⁹ <https://www.globalmethanepledge.org/sites/default/files/documents/2023-11/Global%20Methane%20Pledge.pdf>

- Further, Australian decarbonisation sector emissions reduction plans exist and engage at a high level with the opportunity to reduce fossil (fugitive) methane emissions, however implementation structures and efforts are lacking.

There is not currently a target to provide an unambiguous signal on the pace of methane abatement required within the broader policy set. There is therefore no signal to prioritise on-site methane abatement in the fossil fuel sector, despite this offering a powerful abatement opportunity with the potency to immediately slow the speed of accelerating climate change.

The addition of methane targets the sector emissions reduction plans would provide a decision-useful guide to domestic decarbonisation and would strengthen the effectiveness of implementation in the real economy. It would be appropriate for the Resources Sector Plan to be updated to articulate the level of methane reduction targeted by each of the 9 commodity groups modelled, and for the Australian Government to place particular emphasis on supporting implementation¹⁰. Targets of this sort should be mapped to complement Australia's 2030 and 2035 NDCs.

As noted in IGCC's response to Question 8, the Safeguard review may be able to drive more investment to on-site abatement but will not stimulate investment in methane abatement at a level that fully reflects its associated risks and opportunities. As a result, Safeguard revisions, while desirable and important, will be unlikely to stimulate the required level of focus on methane.

IGCC's members include Australia's largest, most sophisticated institutional investors, with stewardship and good governance at the heart of their skillset. We therefore understand the importance of targets in driving visibility both of private entity actions and supportive policy. Clear governance structures and visible targets substantially increase the likelihood of successful action to reduce methane.

Further, our members and the companies that they invest in have emissions reduction targets that build from an understanding that policy measures will align and reinforce their delivery. Our members are better able to pursue and defend their targets when there is public confirmation that the Government too holds targets that commit appropriate action on methane.

Explicit, time-bound targets for each methane-producing industry would recognise the near-term value of methane and grow both public and private sector focus on abatement. Without this focus, the climate risks associated with methane leakage are unlikely to receive commensurate support.

On a more technical note, if a methane reduction target were to be pursued, it should be defined as a percentage below a baseline level of absolute emissions rather than in terms of raw tonnes reduced, noting that unabated methane emissions could grow with mine expansion that would otherwise negate the decarbonisation value of gains made. We note that alignment with OGMP 2.0, and in future Steel Methane Programme, targets would automatically strengthen Australia's competitive standing for exports into the EU.

¹⁰ <https://www.industry.gov.au/sites/default/files/2025-09/disr-resources-sector-plan.pdf>

We acknowledge, and comment in other sections, that methane measurement integrity will continue to improve and evolve as technologies and capabilities advance. Today, volumetric uncertainty remains a feature of methane reporting. This uncertainty is not sufficient to justify the delay of measures to target and achieve methane-specific abatement.

Consultation questions on existing policies and measures

1. Do current policies and measures adequately cover the material sources of fossil methane emissions in Australia? For example, are emissions from decommissioned and abandoned mines material, and are they adequately monitored and mitigated?

Australia's fossil fuel methane emissions policy architecture of course builds from the NGER scheme and the extent to which that scheme captures facility-level methane emissions.

With access to increasing aerial observation capability, there is a growing opportunity to triangulate data points and extend the completeness of the volumes identified and reported for each site. We commend the gas sector OGMP 2.0 method and the UN's Steel Methane Programme for building progressively to integrate precinct-level, aerial observation that would detect higher readings and a requirement to calibrate such data points. This approach is central to addressing the IPCC TACC Guideline Principle of "Completeness".

IGCC notes that, consistent with the Australian Government's response to recommendation 17 of the 2023 CCA review, review of NGER Method 2 for estimating fugitive emissions from open-cut coal mines has already commenced to ensure that it remains fit for purpose and based on the best available science, technologies and practices. We look forward to the findings of this review and hope that incremental improvements can be implemented as soon as practicable, ahead of the review's conclusion in 2028.

At a national level, and particularly for sources of methane that fall outside of NGER reporting, sites that are no longer operated appear to have less continuous monitoring, lower levels of precinct-level observation and calibration to detect leaks and are at greater risk of underreporting.

2. To what extent will Australia's current policy settings, including the Safeguard Mechanism and state regulations, drive near term fossil methane abatement? Please provide relevant analysis or evidence.

As noted in IGCC's response to Question 9, the Australian Government already has commitments to lower methane and other greenhouse gases with near-term potency.

Australia's emissions reduction targets require action, but focussed action on methane is essential to "to limit both the magnitude and the duration of any temperature overshoot", committed in the COP30 'Global Mutirão' agreement¹¹.

Australia's current policy settings are not driving sufficient near-term fossil methane abatement. This is concerning for investors that are exposed to climate risks as holders of Australian sovereign bonds, and to all investors exposed to systemic climate risks across Australian investment portfolios.

Consistent with our response to Question 8 we observe that the Safeguard Mechanism in its current form does not drive fossil methane abatement at a level that is equal to the near-term climate risks associated with methane emissions. Under current settings, the Safeguard mechanism provides significant flexibility for facilities to comply with their baseline emissions through the surrender of ACCUs produced off-site from non-fossil sources. Methane abatement receives no additional emphasis for its near-term potency.

ACCUs have historically funded an important share of fossil methane drainage innovation and investment. As noted under Question 8, however, while we would not wish to limit methane-relevant ACCU development and use, methane-based ACCUs outside of waste management have now largely sunset, there can be substantial lags between method development and receipt of revenues, and that it can be difficult to market fossil fuel-related ACCUs for sale. We therefore place less emphasis on this branch of methane-specific interventions.

Further, current Safeguard liabilities are attached to the facility owner, which may limit space for innovative financial models by which solution proponents can recover their costs from ACCUs at another party's facility.

Developments set in place by the NSW Environmental Protection will support increasing methane measurement accuracy within the state and underpin advances in underground coal mine-specific Ventilation Air Methane abatement. The obligations created only begin to address the abatement potential of fossil methane across industries and across the economy.

3. What fossil methane abatement technologies and practices are commercially ready, or likely to be viable in the near term in Australia? Where available, please provide indicative costs, timelines, and examples.

IGCC underscores that it remains important to reshape fossil fuel value chains through the orderly pursuit of electricity transition away from coal-fired power generation, the progressive electrification of fossil fuel demand where achievable and the development of green steel solutions that rely less on metallurgical coal.

At the same time, technologies and engineered solutions to reduce methane leakage are available and enjoying rapid maturation in other countries including Norway, Canada and China.

¹¹ *Decision 1/CMA.7 'Global Mutirão', Op Cit.*

Examples of relevant interventions include:

Gas	Coal, underground	Coal, open cut
Limiting flaring and venting	Limiting flaring and venting	Enhanced drainage for open cut mines before and after operation
LDAR: Requiring leak detection and repair programs	Ventilation Air Methane (VAM) oxidation technologies: Regenerative thermal oxidisers (RTOs); established technology	LDAR: Requiring leak detection and repair programs
VRU: Vapour-recovery units	Ventilation Air Methane (VAM) oxidation technologies: Regenerative catalytic oxidizer (RCO); pilot stage technology	
Replacing wet compressor seals with dry ones	Goaf gas management	
Electrifying pumps	Enhanced drainage for underground mines before and after operation	
	LDAR: Requiring leak detection and repair programs	

4. What fossil methane abatement activities have Safeguard entities planned, started or completed since the commencement of the Safeguard Mechanism reforms?

Based on information available publicly, it is difficult to say with certainty what methane-specific abatement has been brought forward by the Safeguard Mechanism.

For sites that can monetise or create useful energy from recovered gas, the incentive to address Safeguard liabilities through on-site methane abatement can be more compelling than the on-site abatement of activities that release carbon dioxide or reliance upon ACCUs.

For other sites, the impression from parties working to implement on-site engineering projects that require investment is that Safeguard is useful but doesn't provide a complete economic signal where early adopters face various levels of deployment and regulatory complexity. Additionally, the political environment creates a degree of uncertainty around Safeguard over the next 10 years, which works against action. Investment in on-site interventions likely requires complementary financial supports and clear policy signals from the Australian and state governments, in addition to full confidence in the continuation of Safeguard policy.

Complementary financial supports are likely to take the form of technology and pilot funding. The GM3 Appin Illawarra coal mine has a methane Ventilation Air Methane pilot underway using a regenerative thermal oxidiser (RTO) solution. This project has received top-up funding support from the NSW Government Coal Innovation Fund. A further RTO trial planned at the Kestrel Mine in the Bowen Basin, QLD, was awarded Commonwealth funding from the Powering the Regions Fund.

Consultation questions on existing barriers and enablers

5. What are the main barriers—whether commercial, regulatory, market or other—preventing the uptake of fossil methane abatement opportunities in Australia? How could those barriers be overcome?

Fossil methane leakage is disadvantaged by:

- Lacking visibility of methane’s near-term potency:
The near-term potency of methane emissions is not readily visible to actors relevant to methane policy and investment in abatement solutions. Without specific directives to focus on methane, methane emissions are almost always converted to carbon dioxide equivalent emissions for disclosure and investment funding decision purposes. As already discussed, this conversion does not recognise methane’s near-term potency and results in emissions disclosures that understate the corresponding climate impact. This in turn means that the climate risks of methane and actions to abate methane receive less than proportionate focus.
- Incomplete coverage of current government policies and measures:
As already discussed, methane receives only partial coverage under the Safeguard Mechanism and several complementary policy supports are warranted.
- Inconsistent abatement project commerciality:
For oil and gas sector operators, methane leak reduction is aligned with revenue maximising behaviour through the recovery of lost gas, whereas other fossil-based activities face significantly less scope to monetise recovered methane and frequently lack the engineering experience to do so. For coal extraction companies in particular the raw economic logic for methane mitigation relies on customer demand signals for low methane coal and policy interventions that are not yet strong. The economic basis for spontaneous coal mine methane mitigation is therefore not strong.
- Imperfect measurement and persistent uncertainty:
Methane leakage is invisible and can be difficult to detect, particularly

where the leakage is not expected or where it occurs at low intensity across a large area, such as an open cut mine, or where the methane intensity of the fossil resource varies.

Australia is fortunate to have foundational NGER reporting enforced nationally, but increasing capability in aerial observation is at times identifying volumetric discrepancies. Where some uncertainty exists, it may be tempting to pause efforts aligned to mitigation. IGCC suggests that efforts should instead:

1. Move ahead with estimation and abatement while tolerant of uncertainty
 2. Promote participation in global frameworks such as OGMP 2.0 and the SMP that call for progressive calibration of on-the-ground and emissions factor-based estimation with aerial observation, and
 3. Encourage technical knowledge-sharing amongst regulators and operators and promote a role for independent technical experts.
- A perception that methane abatement engineering is infeasible:
Methane abatement technologies, processes and costs vary quite significantly by industry and by methane source but are more available and mature than is typically assumed.
 - Insufficient knowledge sharing and support for pilot and scale-up projects:
Solutions that target methane abatement on industrial sites can be accompanied by regulatory and technical complexity and a need to solve for perceived and actual safety and engineering constraints.

Here, collaboration and alignment are essential to the uptake of available solutions at scale, and the improvement of measurement and response over time.

There is not currently sufficient support for joint problem-solving, nor the requisite studies and sharing of best practice across state regulators and operators.

6. What factors are constraining broad deployment of ventilation air methane (VAM) abatement in underground coal mines in Australia? Where possible, please identify any relevant safety, technical, regulatory, commercial or site-specific barriers, and provide evidence or operational experience.

Our knowledge of VAM projects is indirect and from reports citing the efforts of others. We are enthusiastic about the small-scale trial underway at the GM3 Appin Mine in the Illawarra region, which is expected to remove around 36,000 tonnes a year of carbon dioxide equivalent emissions at full scale, but which will build confidence in the deployment of regenerative thermal oxidiser (RTO) technology in Australian coal mines.

We are watching with interest the trial at Aberpergwm Colliery (Energybuild Ltd) in South Wales, UK. Of relevance to Australian coal fields, the project will test regenerative thermal oxidiser (RTO) technology designed to destroy low concentration (~0.2%) ventilation air methane (VAM). We understand that Energybuild Ltd is projecting 1.46 million tCO_{2-e, 100-yr} in abatement over 20 years from the trial, which may be increased fourfold with the installation of a further three RTO units.

7. Do current approaches to measuring, reporting and verifying fossil methane emissions create any practical barriers to the uptake of abatement options in Australia? Please identify the relevant issue and explain how it affects abatement decisions, incentives or compliance outcomes.

Referring to the observations made under question 5, under the subheading ‘Imperfect measurement and persistent uncertainty’, we note that reporting of raw volumes of leaked fossil fuel related methane is subject to continuing uncertainty and evolution.

Naturally, more accurate and more visible reporting will map favourably to an ability to measure progress in volume reduction and to support greater scrutiny of leaked methane volumes and abatement opportunities.

IGCC underscores the importance of DCCEEW’s annual consultation and review of NGER reporting rules and look forward to the recommendations of the Expert Panel on Atmospheric Measurement of Fugitive Methane Emissions in Australia to define a pathway for the use of aerial observation to calibrate methane levels calculated from emissions factors and monitoring of operations or samples.

We commend schemes designed to build growing maturity in measurement, including OGMP 2.0 for the gas sector and the UN’s Steel Methane Programme, and encourage the participation of companies in relevant sectors that are not yet members.

IGCC members underscore that active methane abatement is critically important and should not await full accuracy and consensus on reported methane volumes.

Further information

IGCC welcomes ongoing engagement with the CCA as this work progresses.

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