



Environmental  
Defenders Office

**Submission on the 2024 Proposed Amendments to the  
National Greenhouse and Energy Reporting Scheme**

**24 May 2024**

## About EDO

EDO is a community legal centre specialising in public interest environmental law. We help people who want to protect the environment through law. Our reputation is built on:

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

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

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

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### Submitted to:

Department of Climate Change, Energy, the Environment and Water  
Australian Government

By portal: <https://consult.dcceew.gov.au/national-greenhouse-and-energy-reporting-nger-scheme-2024-proposed-updates>

### For further information on this submission, please contact:

Revel Pointon  
Managing Lawyer  
Southern and Central Queensland  
T: 1800 626 239  
E: [revel.pointon@edo.org.au](mailto:revel.pointon@edo.org.au)

Briana Collins  
Solicitor  
Human Rights and Coal  
T: 1800 626 239  
E: [briana.collins@edo.org.au](mailto:briana.collins@edo.org.au)

## **Acknowledgement of Country**

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

EDO recognises self-determination as a person's right to freely determine their own political status and freely pursue their economic, social and cultural development. EDO respects all First Nations' right to be self-determined, which extends to recognising the many different First Nations within Australia and the Torres Strait Islands, as well as the multitude of languages, cultures, protocols and First Laws.

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

## Executive Summary

Environmental Defenders Office (**EDO**) welcomes the opportunity to comment on the proposed 2024 updates to the National Greenhouse and Energy Reporting (**NGER**) scheme. Urgent updates are required to the scheme, particularly in relation to the existing monitoring, verification, and reporting (**MRV**) standards in the National Greenhouse and Energy Reporting (Measurement) Determination 2008 (Cth) (**Measurement Determination**) as relates to methane emissions. Meeting internationally agreed climate commitments requires methane emissions derived from fossil fuels to fall by 75% this decade.<sup>1</sup>

Coal mines represent the most significant<sup>2</sup> and avoidable<sup>3</sup> sources of methane emissions in Australia. Advanced methane-detecting satellites such as MethaneSAT and platforms like Open Methane, are proving that fugitive methane emissions from coal mines are significantly higher (and possibly double)<sup>4</sup> than what is reported under the current NGER MRV standards,<sup>5</sup> demonstrating that the standards are not fit for purpose. This is largely because the existing methods for reporting in the NGER Act allow facilities to guess, rather than measure, their emissions.<sup>6</sup>

Improper reporting of Australian methane emissions is in disaccord with our international greenhouse gas inventory reporting requirements under the United Nations Framework Convention on Climate Change, and interrupts state and territory governments' capability to properly assess and regulate individual projects for environmental impact and social impacts. A lack of accurate data also makes impossible the task of meeting Nationally Determined Contribution targets, and regional emissions reduction targets legislated by the states and territories, such as the 2050 net-zero emissions target recently enacted in the *Clean Economy Jobs Act 2024 (Qld)* and *Climate Change (Net Zero Future) Act 2023 (NSW)*. Without reliable reporting, the extent of the problem is unknown, and the solutions are hamstrung.

EDO supports in full the recommendations made by the Climate Change Authority in their 2023 review of the NGER Act in relation to fugitive emissions and MRV standards, and recognises that the Department's complete response to the suite of recommendations in that review is pending. As a start, EDO is supportive of the Department's steps to phasing out Method 1 reporting for open-cut coal mines.

However, EDO submits that the Department's proposed reforms the subject of this consultation signal an undesirable divergence from the direction and ambition of the reforms proposed by the

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<sup>1</sup> International Energy Agency, *Curtailing Methane Emissions from Fossil Fuel Operations: Pathways to a 75% Cut by 2030, 2021*. Accessed: <https://doi.org/10.1787/1616ff90-en>.

<sup>2</sup> Department of Climate Change, Energy, Environment and Water, *Australia's National Greenhouse Accounts*. Accessed: <https://greenhouseaccounts.climatechange.gov.au/>.

<sup>3</sup> Ember, *Australia's Coal Mines can Deliver Two Thirds of Methane Cuts*. Accessed: <https://ember-climate.org/app/uploads/2022/10/Report-Australias-coal-mines-can-deliver-two-thirds-of-methane-cuts.pdf>.

<sup>4</sup> Ben Potter, *Coal mine methane twice official disclosures: Sims*, 30 April 2024, *Australian Financial Review*. Accessed: <https://cdn.sanity.io/files/1pv5uha8/production/2192a9fbe640fbce23ad76732851958e0c855115.pdf>.

<sup>5</sup> See, for example, Australian Conservation Foundation, *Annual Australian methane plume summary, 2023*. Accessed: <https://www.acf.org.au/annual-australian-methane-plume-summary-2023>.

<sup>6</sup> Energy and Resource Insights, *Monitoring, Reporting and Verification of Fossil Methane in Australia, 2023*. Accessed: <https://energyresourceinsights.com/wp-content/uploads/2023/03/FossilMethaneInAustralia.pdf>.

Climate Change Authority, which call for development of methods aligned with international gold standards. The Department’s proposals rely excessively on Methods 2 and 3, which lack integrity and threaten the efficacy of the Safeguard Mechanism, arbitrarily limit application of the reforms to Safeguard Facilities, and draft transparency reforms which are needlessly modest considering the enormous public interest in greenhouse gas emissions and their contributions to climate change.

EDO’s response to this consultation is limited to addressing these key concerns specific to the proposed 2024 updates. Overall, EDO’s recommendations are aimed at ensuring that the ambition of the reforms is to implement highest order MRV standards, not merely standards higher than Method 1, and advocating for transparency measures aimed at public accessibility. Scheme-wide transition to highest order methods must be expedited commensurate with the need for urgent action to meet emissions reduction targets and stabilise global warming in line with commitments under the Paris Agreement.

EDO intends to respond to the full suite of proposed reforms in future consultation on the Department’s response to the 2023 Climate Change Authority review, anticipated by 30 June 2024.

#### **Summary of Recommendations**

- 1. Phase out Methods 1 (rr 3.20, 3.32), 2 (r 3.21), and 3 (3.26) of the National Greenhouse and Energy Reporting Act 2007 (Measurement) Determination for all emissions sources as a matter of urgency.**
- 2. Interim Method 2 and 3 reporting standards must apply reviewed methodologies to existing and new Method 2 and 3 reporters.**
- 3. Amend the National Greenhouse and Energy Reporting (Safeguard Mechanism) Rule 2015 (Cth) to prevent the issue of Safeguard Mechanism Credits because of reporting methodology change.**
- 4. Strike out “Method 1” in ss 3.85A, 3.85B, 3.85K, 3.85L, 3.85M, 3.85N, 3.85R, 3.85S and notations to mandate Method 4 for natural gas production emissions sources.**
- 5. Apply the phase-out of Methods 1-3 to all reporters, not just Safeguard Facilities.**
- 6. Increase transparency of NGER data immediately by making datasets compatible with time series analysis, and other measures.**
- 7. Apply transparency measures across the whole scheme.**

**All emissions sources must require higher-order MRV methods that include direct measurement and source-site reconciliation. It is not sufficient to transition from NGER Methods 1 to Methods 2 or 3.**

**The Department’s proposal is only in partial recognition of the Climate Change Authority’s recommendations. The transition to “higher order” methods must aim for OGMP 2.0 and MMP level 5 standards.**

The Department is proposing to phase out Method 1 for reporting emissions of open-cut coal mines, beginning with Safeguard Mechanism facilities that produced more than 10 million tonnes of coal in financial year 2023, from 1 July 2025, and other Safeguard Mechanism facilities from 1 July 2026.<sup>7</sup> The Department is also proposing to replace references to Method 1 with Method 2 within the available methods for estimating fugitive emissions in natural gas production from cold process vents, well blowouts, CO<sub>2</sub> stimulation and vessel blowdowns, compressor starts and compressor blowdowns.<sup>8</sup>

These proposals are in partial recognition of Recommendations 15-17 of the Climate Change Authority in the 2023 review. Recommendation 15 in full was to phase out Method 1 estimation methodologies for *all* fugitive methane emissions, noting that the phase out of Method 1 for coal extraction is a matter requiring urgency. Recommendation 15 also must be read with Recommendation 17, to urgently review Method 2 for extraction of coal in open cut coal mining with respect to sampling requirements and standards, and Recommendation 16, to establish higher order estimation methods for *all* fugitive emission sources included in the Measurement Determination.

The Climate Change Authority’s recommendations were also couched in their endorsement of the international “gold standard” methodologies: Level 5 of the Oil and Gas Methane Partnership (**OGMP**) 2.0 and Metcoal Methane Partnership (**MMP**) methods.<sup>9</sup> Each of these methodologies require direct reporting with detailed disaggregation of sources, and site-level measurements for quality assurance of total source-level measurements.<sup>10</sup>

None of the methods available under the NGER Act require site-level reconciliation of source-level measurements. Only Method 4 requires direct monitoring. Methods 2 and 3, which appear to be endorsed by the Department in its consultation paper, can only give estimates of emissions, with varying accuracy.

As such, a reading of the Climate Change Authority’s recommendations, as a whole, demonstrates that the necessary reforms of the NGER MRV standards must transition all sources of emissions to “higher-order” methods, where the aim should be to develop the highest order methods, that require site-level reconciliation of source-level measurements.

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<sup>7</sup> Consultation Paper, J, 2, Schedule 1, Item 5.

<sup>8</sup> Consultation Paper, Schedule 1, Item 13.

<sup>9</sup> Climate Change Authority, 2023 NGER Act Review, 75.

<sup>10</sup> Climate Change Authority, 2023 NGER Act Review, 75.

EDO is concerned that the Consultation Paper indicates that the direction of the Department is to funnel current Method 1 reporters into Method 2 or 3 reporting, with little ambition evident to transition sources to the international gold standards, or even to NGER Method 4 as the best interim option available. This direction will not close the gap between real emissions recorded by satellites and reported emissions in the National Inventory, for the reasons outlined below, failing to rectify the threat that underreported emissions poses to the achievement of Australian and regional emissions reduction targets.

### Methods 2 and 3 lack integrity and could worsen inaccuracies.

Endorsement of Methods 2 and 3 is concerning for numerous reasons, particularly as relates to coal mine methane.

**First**, Methods 2 and 3 are still estimations, not real measurements, in contrast to Method 4 and OGMP 2.0 and MMP Levels 3-5.

**Second**, the methodology for estimating coal mine methane for Methods 2 and 3 is flawed, not developed independently, and out of date.

The guideline known as ACARP, referenced in the Consultation Paper as the applicable methodology to Methods 2 and 3,<sup>11</sup> was developed by the Australian coal industry, and is almost 15 years old. Technical problems with the ACARP method include:

- it is not compatible with reconciling emissions estimates with other data sources, even where sources exist that could prove the estimates inaccurate;
- it relies on subjective judgment of employees who require no specialist training, are not independent, nor subject to professional standards;
- terms are undefined, which permits excessive flexibility in application – for example three boreholes should be made per “domain”, where “domain” is not defined;
- it bears no relationship to best practice, and incorporates no process for methodology improvement or review; and
- there is no process to account for released methane from overburden removal, where most mines conduct sampling and develop reporting models after removing the overburden.

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<sup>11</sup> Consultation Paper, 9.

The Climate Change Authority raised concerns with the ACARP methodology in relation to its Recommendation 17,<sup>12</sup> as discussed below. This combination of factors gives little assurance that Methods 2 and 3 are capable of estimations that bear a sufficiently close relationship to actual emissions.

Reporting under Methods 2 and 3 in general is not ideal for accuracy in the long term, and higher-order methods must be rolled-out for all emissions sources – that is, methods that require source-site reconciliation of data. However, reporting under Methods 2 and 3, without significant review of the questionable substance of the methodology, is highly problematic, and could result in even less-accurate reporting than given by current Method 1, at least in relation to open-cut mines. The relationship that has with the efficacy of the Safeguard Mechanism is discussed below.

**Recommendation 1: Phase out Methods 1 (rr 3.20, 3.32), 2 (r 3.21), and 3 (3.26) of the National Greenhouse and Energy Reporting Act 2007 (Measurement) Determination for all emissions sources as a matter of urgency.**

**Solving the integrity problems of Methods 2 and 3 after the transitions from Method 1 are made and without retrospective application, is no solution at all.**

The Climate Change Authority in its 2023 Review of the NGER Act noted their concerns with the ACARP methodology and made its Recommendation 17,<sup>13</sup> to urgently review Method 2 for extraction of coal in open cut coal mining with respect to sampling requirements and standards.

The Consultation Paper acknowledges this Recommendation and delays addressing it to a later date, proposing that:<sup>14</sup>

Should a review of Method 2 be conducted and identify the need to make material changes to sampling requirements and standards, consideration will be given to when the updated requirements and standards would apply, such as applying any updates to those areas of a mine that are not yet covered by an existing model or where work to develop a model based on the existing requirements and standards has not commenced.

Here, the Department appears to be signalling that the facilities which are already reporting under Method 2, and facilities which begin the work to transition to Method 2 reporting before any review into Method 2 sampling methods occur, will not have to comply with any updated sampling measures. This approach would render inoperative any benefits that a review into Method 2 sampling requirements would have by greatly restricting their application.

While EDO submits that open-cut coal emissions sources should have developed a higher order method than current Methods 2 or 3, any reliance on Method 2 or 3 in the interim could result in

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<sup>12</sup> Climate Change Authority, 2023 NGER Act Review, 81.

<sup>13</sup> Climate Change Authority, 2023 NGER Act Review, 81.

<sup>14</sup> Consultation Paper, 10.



severe under-reporting if the transition is made prior to reviewing the substance of the methodology.

**Recommendation 2: Interim Methods 2 and 3 reporting standards must apply reviewed methodologies to existing and new Methods 2 and 3 reporters.**

**The capability of the Safeguard Mechanism to achieve emissions reduction targets will be impacted by transition to Methods 2 or 3 without due care.**

The shift from Methods 1 to 2 or 3 may result in lower reported emissions from open-cut mines due to the integrity issues with the ACARP methodology, which will have consequences for the efficacy of the Safeguard Mechanism.

As facilities' initial production variables will be based on historical emissions, those which reported lower emissions under Method 1 than they will under Method 2 or 3 will inherit a glut of Safeguard Mechanism Credits purely because of a change in reporting methodology. This will distort the achievements of the Safeguard Mechanism by clogging the scheme with credits that do not represent real emissions reduction and will render real emissions reduction unnecessary for some facilities.

At a sector level, this problem will be exacerbated by the fact that close to half of open-cut coal facilities reported using Method 1 in financial year 2023.<sup>15</sup>

Appropriate measures must be in place within the Safeguard Mechanism to ensure that the intention of Safeguard Mechanism Credits is not distorted by NGER MRV reforms.

**Recommendation 3: Amend the National Greenhouse and Energy Reporting (Safeguard Mechanism) Rule 2015 (Cth) to prevent the issue of Safeguard Mechanism Credits because of reporting methodology change.**

**There is no reason to restrict application of Method 1 phase-out to Safeguard Facilities.**

A further unnecessary deviation from the Climate Change Authority's recommendations is the Department's proposal to apply the phase out of Method 1 for open-cut coal mines to Safeguard Facilities only. The Climate Change Authority did not restrict the relevant recommendations to Safeguard Facilities, and EDO cannot determine a satisfactory reason to do. The Department states in the Consultation Paper that the reason relates to the relative contributions to fugitive emissions of Safeguard Facilities compared to non-Safeguard Facilities.<sup>16</sup> While that may be the case, for Australia's National Inventory to be accurate, all greenhouse gas emissions, regardless of size, must be reported appropriately.

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<sup>15</sup> Consultation Paper, 7.

<sup>16</sup> Consultation Paper, 8.

**Recommendation 4: Apply the phase-out of Methods 1-3 to all reporters, not just Safeguard Facilities.**

### **Method 4 is already available for natural gas production emissions sources. Why cap ambition at Method 2?**

The Department's proposals as they relate to phasing out Method 1 (or strictly, "correcting the categorisation" of Method 1),<sup>17</sup> for natural gas production, cap ambition at Method 2, where the Department is well-positioned to make Method 4 mandatory for the relevant emissions sources. Currently, s 3.85A, proposed to be amended in Item 13 of Schedule 1 to the Consultation Paper, gives the option of Method 1 or Method 4 for estimating emissions relating to cold press vents. The amendments would allow for Method 2 or Method 4. The same goes for s 3.85K for well blowouts, s 3.85M for CO2 stimulation and s 3.85R for vessel blowdowns, compressor starts and compressor blowdowns. The Department has not provided adequate reasoning to include Method 2 as an option for these emissions sources, and inclusion of Method 2 as an alternative to Method 4 will have the practical effect of capping the reporting ambition of facilities at Method 2. EDO submits that this amendment be revisited to strike out, rather than replace, "Method 1".

Method 4 is preferable in the short term to Methods 2 and 3 because it requires direct site-level monitoring. However, in the Department's staged roll out of the Climate Change Authority's recommendations, the development of methods beyond Method 4, that include site reconciliation of source-level measurements, must be prioritised.

**Recommendation 5: Strike out "Method 1" in ss 3.85A, 3.85B, 3.85K, 3.85L, 3.85M, 3.85N, 3.85R and 3.85S and notations, to mandate Method 4 for natural gas production emissions sources.**

### **Broader transparency measures for NGER data can and should be implemented in this cycle of reforms**

#### **The Department's transparency proposal does not meet the ambition of the Climate Change Authority.**

The Department proposes to introduce the requirement that the Clean Energy Regulator publish the methods used by Safeguard Mechanism facilities to estimate fugitive methane emissions from coal mining, oil, and natural gas sources.<sup>18</sup>

This proposal references the Climate Change Authority's recommendations 9-12 as to transparency, which include:

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<sup>17</sup> Consultation Paper, 10.

<sup>18</sup> Consultation Paper, E, 18.

- Publishing emissions data by source and type at the facility level;<sup>19</sup>
- Publishing time-series data;<sup>20</sup>
- Publishing information on estimation methods;<sup>21</sup> and
- Improving presentation and accessibility of published data.<sup>22</sup>

The Department’s proposal to address transparency is a step in the right direction but falls well short of those changes recommended by the Climate Change Authority.

**Transparency reforms are urgent in the climate crisis, and must prioritise the usability of data for the public.**

Maximising public accessibility is vital good governance, but particularly for an issue as critical to the public interest as greenhouse gas emissions and their relationship to pollution, climate change exacerbation, biodiversity loss, and loss of life, health, and cultural connection. As such, improvements to transparency should be prioritised in the roll-out of reforms to the NGER Act. Of utmost importance is the ability for datasets to have utility for the public, which would require at a minimum that datasets are published compatibly with time-series analysis.

EDO presses Recommendations 9-12 of the Climate Change Authority’s 2023 Review in response to the Department’s proposal, and notes that further improvements to data transparency could include:

- Publishing sample data taken to determine Methods 2 and 3 emissions factors, while these methods are still in use during the transition to higher-order methods; and
- Publishing concentrations associated with calculating Method 4.

**Recommendation 6: Increase transparency of NGER data immediately by making datasets compatible with time series analysis, and other measures.**

**There is no need to single out Safeguard Facilities, or sectors, for transparency measures.**

Transparency measures should apply consistently across the scheme to maximise scheme-integrity. While Safeguard Facilities and oil, coal mining and natural gas sources do make up the major emitters, public access and accessibility of all data ensures that a complete picture is available to the public to make their own assessments.

**Recommendation 7: Apply transparency measures across the whole scheme.**

<sup>19</sup> Climate Change Authority, 2023 NGER Act Review, 58.

<sup>20</sup> Climate Change Authority, 2023 NGER Act Review, 59.

<sup>21</sup> Climate Change Authority, 2023 NGER Act Review, 59.

<sup>22</sup> Climate Change Authority, 2023 NGER Act Review, 59.

## Conclusion

While the EDO supports the Department's steps toward transitioning reporting methodologies to higher order methods in the proposed reforms, it submits that what is required by the Climate Change Authority recommendations, and the achievement of Australia's Nationally Determined Contribution and regional emission reduction targets, is that the Department urgently transition to *highest* order methods, which require source-site measurement reconciliation.

This approach should apply to the whole scheme once methods aligned with OGMP 2.0 and MMP have been developed. In the interim, NGER Method 4 should be prioritised where possible over Methods 2 and 3, which lack integrity. Where Methods 2 and 3 must be relied on during the transition period, they should use revised methodologies because ACARP is unreliable.

Holistic transparency measures can and should be implemented as a priority to ensure public access to material that is of enormous public interest given the scale and urgency of the climate crisis.

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