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National Greenhouse Accounts  
National Inventory Systems and International Reporting Branch  
Department of Climate Change, Energy, the Environment and Water  
To: [nationalgreenhouseaccounts@dcceew.gov.au](mailto:nationalgreenhouseaccounts@dcceew.gov.au)

To whom it may concern,

Thank you for the opportunity to comment on the 2023 Proposed Amendments to the National Greenhouse and Energy Reporting (NGER) Scheme. Please accept the Australian Conservation Foundation (ACF)'s brief submission in relation to the proposed amendment to Method 1 for estimating methane emissions from Queensland open cut coal mines.

I note that the proposed amendment will increase the emissions factor by approximately 35 per cent. Any amendment which brings emissions factors closer to reflecting reality is welcome, however ACF is concerned that a 35 per cent increase is not yet close enough.

The [International Energy Agency estimates](#) that Australia underreports its methane emissions by over 60 per cent. A great proportion of Australia's fugitive methane comes from the Bowen Basin in Queensland. We know that underground mines, by virtue of monitoring emissions at their vents/exhausts/drainage units, report fugitive methane far more accurately. It follows that open cut mines are responsible for a significant proportion of Australia's reporting 'gap'.

This is borne out in the data. A [2021 study using TROPOMI](#) focussed on six mines in the Bowen Basin identified as 'super-emitters'. The analysis showed the Oaky Creek and Grasree (Capcoal) emitted 3.75 MtCO<sub>2</sub>e of methane and Broadmeadow (Goonyella), Grosvenor and Moranbah North emitted 4.75 MtCO<sub>2</sub>e of methane. The scope 1 emissions reported in the closest relevant period under the Safeguard roughly accords with these figures (within 10 per cent). These mines are either combined complexes or underground mines.

On the other hand, Hail Creek—an open cut mine—was shown in the analysis to have emitted 5.7 MtCO<sub>2</sub>e and only reported 0.5 MtCO<sub>2</sub>e under the Safeguard. A 35 per cent increase in the emissions factor for Hail Creek is not going sufficiently improve its reporting.



Method 1, even at its best, is a blunt instrument. If it were to be improved to accurately reflect the fugitive methane emissions at Hail Creek, it would likely produce overreported emissions at the other facilities and still would not capture idiosyncratic methane events. Method 1 is too simplistic. All black coal miners (Queensland and elsewhere) should be required to (at least) employ methods 2 or 3.

Methods 2 and 3 should be reviewed and updated, and the Department should consider exploring the incorporation of aerial, satellite and direct measurement technologies into the NGER scheme.

Australia is a party to the Global Methane Pledge—there is a global imperative to reduce methane emissions this decade to prevent the worst effects of climate change and safeguard our future. The Commonwealth Government is amending the Safeguard Mechanism to require greater emissions reduction ambition from designated large facilities over time. Reducing methane will play a substantial role in emissions reductions.

Method 1 goes against the spirit of the Safeguard Mechanism reforms, given it provides mine operators with an artificial emissions intensity which does not reflect the efficiency or lack thereof of individual facilities. There is no incentive for operators of open cut mines to explore research and development options for methane mitigation, and they cannot be held accountable for climate impacts, while they can report emissions using a back-of-napkin estimate.

We must properly understand and report our methane emissions before we can, in earnest, map a pathway to reducing them. This statement is true at the continent level all the way down to individual facilities. In light of this, we submit that Method 1 should be abolished.

Kind regards,



Annica Schoo  
**Lead Environmental Investigator**

