

18 September 2026

To: Department of Climate Change, Energy, the Environment and Water
Re: 2026-27 Safeguard Mechanism Review

Thank you for the opportunity for the Institute for Energy Economics and Financial Analysis (IEEFA) to provide input to the 2026-27 Safeguard Mechanism Review.

IEEFA is an independent energy finance think tank that examines issues related to energy markets, trends and policies. The Institute's mission is to accelerate the transition to a diverse, sustainable and profitable energy economy.

In this submission we present views based on IEEFA's expertise related to the Safeguard Mechanism's interactions with Australian industrial decarbonisation and coalmining.

Our key points are:

- There is little evidence the Safeguard Mechanism is driving material abatement action in covered facilities. The government should clearly identify emissions reductions from abatement action by companies, differentiated from reductions from other factors such as facilities exiting coverage, closing down/scaling back, or using new reporting methodology. Adding granularity on emissions sources would also increase transparency.
- Complementary measures are likely to be needed to drive abatement in a number of areas, including energy efficiency, electrification and clinker substitution in cement. Government financial support may also be justified to support large investments, as well as for enablers such as common user infrastructure.
- Some government policies need to be reformed to ensure they do not undermine the Safeguard's efforts; the Fuel Tax Credit is a priority.
- Expansions and extensions of fossil fuel projects should be treated as new facilities, with accompanying best practice emissions baselines, while new fossil fuel projects should face net zero emissions requirements from startup.
- There is strong evidence that access to unlimited offsets is hindering the uptake of abatement action, especially in the coalmining and oil and gas sectors. IEEFA would recommend introducing constraints on the use of carbon offsets, at a minimum in cases where companies can reduce their emissions at a lower cost.
- The government should discontinue the 50:50 hybrid approach to baseline setting for coalmines and move towards individual baselines for open-cut and underground mines.
- The government should consider introducing Scope 2 emissions coverage.

Kind regards,

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2. Tracking progress to 2030

Key point #1: There is little evidence the Safeguard Mechanism is driving material abatement action in covered facilities. The government should clearly identify emissions reductions from abatement action by companies, differentiated from reductions from other factors such as facilities exiting coverage, closing down/scaling back, or using new reporting methodology. Adding granularity on emissions sources would also increase transparency.

IEEFA has conducted preliminary (yet-to-be published) analysis of all non-fossil fuel mining, minerals processing, and manufacturing Safeguard Mechanism facilities (hereafter referred to as “the industrial sectors”) in the two monitoring periods since the reformed mechanism began on 1 July 2023. We found that facilities closing or scaling back activity were responsible for greater emissions reductions than the decarbonisation of production processes.

Emissions from these industrial sectors fell by 5%, from [46.4MtCO₂e](#) to [44.1 MtCO₂e](#), between FY2023-24 and FY2024-25. However, it is difficult to determine a categorical Safeguard impact on these results.

One of the most notable sector emissions reductions in this period was Orica’s Yarwun Nitrates plant moving below the 100,000tCO₂e coverage threshold, as the results of [company investment in decarbonised production](#) began arriving. Orica celebrated the 2023 Safeguard reforms for providing a [general sense of investment certainty](#), although progress to a final investment decision (FID) preceded the implementation of these reforms.

Meanwhile, more significant industrial sector emissions reductions can be attributed to facility closures or scale-backs, rather than decarbonisation actions. The largest single fall of 775,000tCO₂e from FY2023-24 to FY2024-25 resulted from Alcoa’s Kwinana alumina refinery progressing [towards closure in September 2025](#).

Close to 1MtCO₂e of additional emissions reductions could be attributed to closures across BHP’s Nickel West operations, First Quantum Minerals’ Ravensthorpe Nickel mine, Oceania Glass’s Dandenong South facility and the Qenos Altona petrochemicals plant in Victoria.

In coalmining, IEEFA [found](#) a shift from Method 1 to Method 2 for methane measurement was a key driver of recent emissions reductions. Method 1 has historically been the default for estimating coalmine emissions, based on state average, benchmark levels. Method 2 relies on self-assessed gas sampling and analysis, with no third-party verification. All open-cut mines in NSW have moved to Method 2, and some have dramatically reduced their reported emissions by doing so. As a result, all large mines now report a methane intensity materially below the estimated state average, with aggregated reported emissions 80% below what they were under Method 1. In Queensland, about half of open-cut coalmines have moved to Method 2, with a further 21 required to do so in coming years. This will likely drive further apparent decreases in emissions without any additional abatement action occurring.

Climate Council analysis also [found](#) little evidence of abatement action under the Safeguard Mechanism, estimating covered industrial facilities only reduced their emissions by 0.4%, while fossil fuel facilities increased emissions by 0.2%.

Adding an emissions source category dimension to published Safeguard facility data — i.e., requiring identification of fugitive, fuel combustion, or other sources of individual greenhouse gases— would have further benefit. This information is already collected under the NGER scheme but is not publicly reported. Implementing this change would be a simple and highly affordable means of incentivising decarbonisation. It could, for example, allow regulators and investors to distinguish a coalmine whose emissions are 95% fugitive methane from one whose emissions mostly derive from diesel combustion, and set subsequent decarbonisation priorities.

3.1.1. Emissions reduction technologies

Key point #2: Complementary measures are likely to be needed to drive abatement in a number of areas, including energy efficiency, electrification and clinker substitution in cement. Government financial support may also be justified to support large investments, as well as for enablers such as common user infrastructure.

A new [report](#) by IEEFA found there are still many untapped opportunities to reduce industrial emissions while delivering cost savings, including: energy efficiency, low-grade heat and underground mining electrification, shifting to renewables in mining, clinker substitution in cement, and capturing fugitive methane emissions. Many of those opportunities can deliver material benefits beyond industry cost savings, including improved productivity, better working conditions for employees and enhanced energy security.

A range of barriers and a lack of effective policy incentives mean Australia lags on their uptake compared with other industrialised countries. In some cases, companies have relied on carbon offsets even though they are more expensive (see 3.1.2). In others, complementary policies may be required to help overcome a range of barriers, including outdated regulation, lack of information and capabilities, costly and complex access to renewable electricity, and low investment prioritisation.

Introducing complementary policies in line with what has worked overseas could put Australia back on track. Examples of such complementary policies identified in IEEFA's report include:

- Energy management policies
- Financial incentives for industrial heat pumps, mining battery electric vehicles (BEVs), and decarbonisation plans
- Cement standards update
- Mining renewable electricity targets
- Methane capture requirements.

Our analysis of non-fossil fuel Safeguard industrial facilities found major decarbonisation investments or studies were frequently accompanied by subsidies from ARENA, the Clean

Energy Finance Corporation, National Reconstruction Fund or other bodies and programs. Some projects also received state-level support. Thirteen of the top 15 facilities in this category by emissions covered received such support. (The highest-emitting of these facilities, BlueScope Steel's Port Kembla Steelworks, also received a major subsidy, but for carbon-intensive production. See [Key point #3](#).)

While improving the Safeguard and related policy mechanisms could avoid some need for this funding, support will likely still be required to achieve expected corporate rates of return, particularly where integrating with ageing assets facing the end of their economic lives.

Government also has a role to play in connecting industry to clean energy and economic opportunities, including provision of common user infrastructure and stimulating demand for green goods. Europe's creation of the [Clean Industrial Deal](#) as a complement to its emissions trading system (although the ETS is only truly being extended to industry with the advent of the [Carbon Border Adjustment Mechanism](#)) is a good example of aligning stick and carrot-based approaches.

Key point #3: Some government policies need to be reformed to ensure they do not undermine the Safeguard's efforts; the Fuel Tax Credit is a priority.

Policies and external factors that favour fossil fuel consumption often override the Safeguard Mechanism's relatively weak investment signal. [Previous IEEFA analysis](#) has questioned government expectations that the combination of Safeguard Mechanism impacts and decreased production would drive significant mining sector diesel emissions declines in the coming decade. Instead, IEEFA has found recent trends point to continued increases.

The Fuel Tax Credit (FTC) system is a key reason mining companies have little incentive to shift away from diesel use, in particular. IEEFA has calculated the cost of Safeguard Mechanism compliance through carbon credits is equivalent to 14¢ per tonne of coal, while the FTC amounted to ~\$5.15/t support for diesel consumption at the then rebate rate of 52¢ per litre.

If the FTC system remains unreformed, IEEFA has [considered](#) alternative measures to rein in the incentive to burn diesel. Miners' FTC access is entirely unconditional — unlike on-road trucking companies, which must meet environmental conditions. IEEFA has proposed making the receipt of credits conditional to levels of Safeguard Mechanism compliance, restricting use for mining facilities whose emissions exceed their baseline by a considerable amount, such as 30%.

Other government policies can similarly undermine Safeguard action. For example, BlueScope Steel — operator of the Port Kembla Steelworks, the third-highest emitting, and highest emitting non-fossil fuel Safeguard facility — gained a significant [A\\$137 million](#) in government support to progress its blast furnace relining in 2024, helping to sustain carbon-intensive production.

Key point #4: Expansions and extensions of fossil fuel projects should be treated as new facilities, with accompanying best practice emissions baselines, while new fossil fuel projects should face net zero emissions requirements from startup.

The Climate Council recently recommended that fossil fuel extensions and expansions be treated as “new facilities” rather than “existing facilities”. Under current Safeguard arrangements, this would attract “best practice” emissions baselines over facility-specific or industry standard equivalents. The Climate Council also recommended new fossil fuel developments be given a net zero emissions-baseline in line with the precedent established for certain new gas fields.

While IEEFA has not specifically analysed this issue, our research broadly supports this recommendation. We have found that:

- Mining companies routinely [rely on low-cost offsets](#) while expanding or extending emissions-intensive production.
- Coal production volumes in Australia are rising. While a global transition away from coal is under way, and some mines are nearing the end of their lifespans, a large pipeline of new mines are awaiting — and receiving — approval.
- Proposed coalmine expansions and extensions can drive a material increase in emissions. For example, Hunter Valley Operations [proposed](#) a 19-year extension of coalmining operations, which, combined with a production increase of about 30%, would increase onsite emissions over the life of the project by [15MtCO₂e](#), without any commitment to decarbonisation.
- Pre-mining is the best time to implement methane capture technologies, which makes it important to have incentives at the time investment decisions are made. A key barrier to mine electrification, for example, is when the remaining life of the mine is too short to recover additional cost of the assets. Design decisions must also be made before development starts.
- Most coalmine extensions, if required, generally propose that if approved they will proceed to study abatement opportunities within a defined period, such as two to three years, and report back to the regulator. These open-ended private agreements provide no guarantee of credible consideration, nor transparency.
- Best practice emissions intensity baselines applying to new coal facilities are more than 10 times lower than the coalmine default average intensity rates applying to existing facilities (0.00592tCO₂e/run-of-mine tonne vs 0.0653tCO₂e/ROM t). This inequity should be addressed by open-cut mine extension receiving the “best practice” intensity rate for tonnes in the extension.
- Suitable “best practice” emissions intensity for underground mines should be investigated, taking account of the higher rate of methane emissions relative to open-cut mines.

3.1.2. Domestic offsets

Key point #5: There is strong evidence that access to unlimited offsets is hindering the uptake of abatement action, especially in the coalmining and oil and gas sectors. IEEFA would recommend introducing constraints on the use of carbon offsets, at a minimum where companies can reduce their emissions at a lower cost.

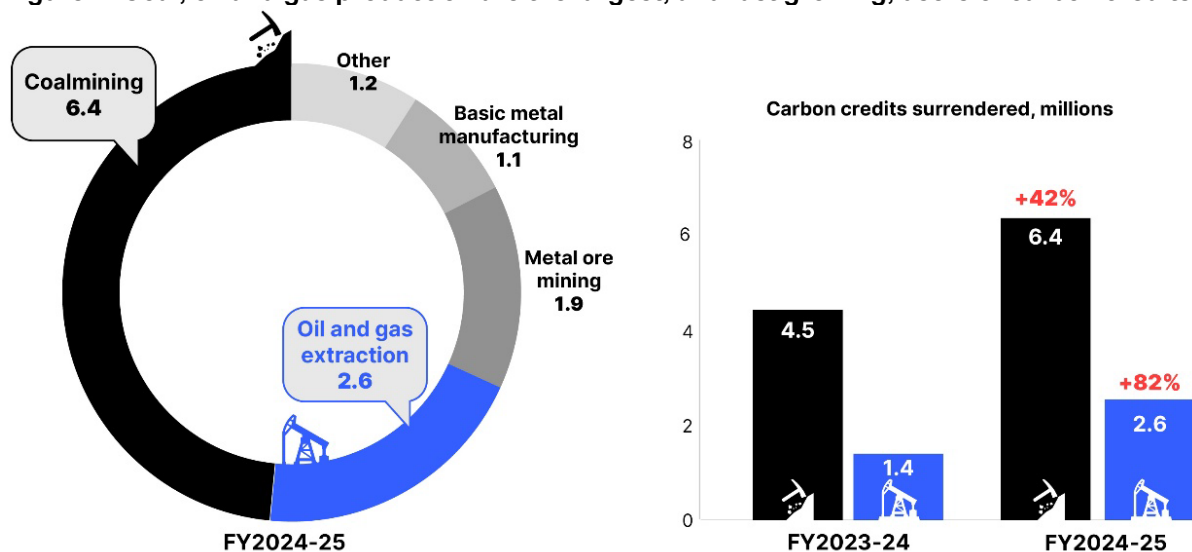
Based on IEEFA's analysis of the 86 non-fossil fuel industrial production facilities monitored in FY2024-25, at an aggregate level, emissions were actually higher than their baselines required (44.1MtCO₂e, compared with 42.5MtCO₂e). Our analysis shows just 21 (less than a quarter) of assessed facilities recorded onsite emissions below their assigned baselines. The remainder used credit-based compliance (surrender of Australian Carbon Credit Units or Safeguard Mechanism Credits), exceeded their baselines, or borrowed against future baselines requirements.

Nine facilities that favoured credit-based compliance — all miners — crossed the threshold of ACCUs covering 30% or more of baselines, requiring [formal explanation](#) to the Clean Energy Regulator (CER). The explanation letters mostly suggested a lack of confidence in electrification technology, as well as financial barriers, such as the life of the mine being shorter than the hurdle rate for investments. Recent analysis has shown that shifting to electric mining equipment [can be profitable in the long-term](#). The affordability of offsets can, however, incentivise short-term decision-making that sustains emissions-intensive activity.

For the coal sector specifically, gross onsite emissions are not falling. Coal's covered emissions rose from 31.4Mt to 31.7MtCO₂e between FY2023-24 and FY2024-25 — 19.5Mt of it methane — the only major sector to increase while total Safeguard emissions fell. The net emissions targets of the Safeguard are being met through offsets: coal projects surrendered about 5.1 million ACCUs in FY2024-25, about 49% (or 6.4 million) of all Safeguard credit (SMC and ACCU) use, of which roughly 60% of ACCUs surrendered were land-based vegetation credits, and only about 36% methane-related.

Combining coalmining with oil and gas production, fossil fuel production represented more than two-thirds of carbon credits surrendered in FY2024-25 (Figure 1). The use of carbon credits grew strongly year-on-year, with coalmining growing by 42% and oil and gas extraction by 82%.

Figure 1: Coal, oil and gas production are the largest, and fast growing, users of carbon credits



Source: IEEFA, [The coal-fired carbon credit market](#)

This is despite both sectors having access to much more cost-effective onsite abatement (See Appendix B). Fugitive methane capture is often cost-effective for oil and gas companies, and comes at a low cost for coalmining companies, due to the value of the methane captured, which can be used onsite or sold.

IEEFA has not specifically analysed the potential ways in which access to carbon offsets could be constrained. A minimum expectation would be that carbon offsets are not used when lower cost abatement is available to the company.

Information on the viability and cost of abatement measures by Safeguard facility is scarce. Annual Sustainability Reports and ESG datebooks contain corporate climate disclosures, but typically at the entity, not individual facility, level, including with respect to onsite abatement versus crediting arrangements.

Facility-level carbon abatement plans would complement rather than duplicate corporate climate disclosure. The NSW government already requires high-emitting coalmines to publish Climate Change Mitigation and Adaptation Plans (CCMAPs). These will be introduced progressively from 2027, and could provide useful guidance for Safeguard facilities.

Any company-provided information should be verified against neutral sector-wide analysis to ensure it does not misrepresent decarbonisation opportunities or their costs.

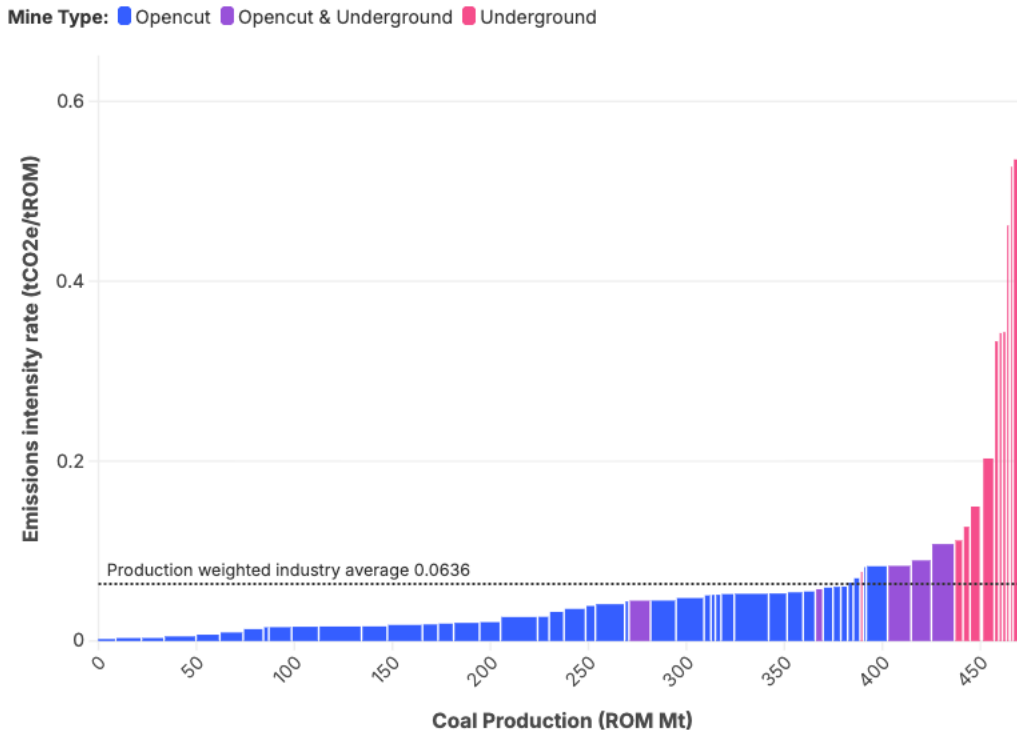
Given methane emissions on a 20-year time frame are estimated to be three times [more](#) than reported (global warming potential/GWP₂₀ of 84 versus GWP₁₀₀ of 28, as adopted for reporting), offsetting could be restricted to 100-year offset schemes. Indeed, the [Climate Change Authority](#) reported that projects with a 25-year permanence are increasingly being used, and make up more than half of the ACCUs issued to sequestration projects. This would significantly undercompensate for the emissions created.

3.4.1. Coalmining-specific issues

Key point #6: Government should discontinue the 50:50 hybrid approach to baseline setting for coalmine facilities and move towards individual baselines for open-cut and underground coalmining.

[Schedule 1 of the Safeguard Rule](#) sets out production variables for covered facilities. Production variables for coalmining (under Part 13), specify the default emissions intensity is the average of: (a) 0.0653tCO₂e; and (b) the facility-specific emissions intensity number for the facility, per tonne of ROM coal. Applying an average of default rate and facility-specific rate such as this appears to be unique to coal production. The Consultation Paper for the Safeguard Mechanism review states industry-average values are “sufficiently representative”. In IEEFA’s view, this is not accurate for coal. Nearly all open-cut mines sit below the average; underground mines sit about five times above it. Blending the two yields a baseline that represents neither type (see Figure 2).

Figure 2: Emissions intensity of Safeguard Mechanism covered coalmines



Source: CER

The consequences are:

- It penalises underground mines. Underground mines are the only type that introduced methane abatement before the Safeguard Mechanism existed, typically by flaring and/or capturing and using this gas. Instead of earning some protection as early movers, underground mines now need to deliver steep emissions reductions — due to the distinctly lower default intensity rate factored into their baselines. They are worse off under the industry-average approach. Early underground movers face the steepest effective decline relative to existing open-cut mines.
- It rewards below-average existing open-cut mines, whose baselines drift up towards the order-of-magnitude-higher default intensity rate, with SMCs earned for no abatement. Those baselines are roughly 10 times more generous than the best practice benchmark applied to a new mine (~0.006tCO₂e versus 0.065tCO₂e per tonne of ROM coal). IEEFA previously found that the largest open-cut mines, in FY2024-25 faced little to no requirement to reduce their emissions under the baselines.

Setting distinct baselines for open-cut and underground mines, by removing the default intensity rate, would provide a better incentive, such that each facility baseline is set on a downward trajectory according to the Safeguard Mechanism decline rate, post-2030. The review is yet to determine what the decline rate post-2030 will be but at least all coal facilities would be required to reduce baselines at that same rate thereafter. This might stop disincentivising the development of underground mines, which present a better outlook for future emissions reductions.

3.5. Coverage

Key point #7: Government should consider introducing Scope 2 emissions coverage.

As discussed in IEEFA's new [report](#), a shift to renewables to support mining operations is one of the most cost-effective emissions reductions available today.

There are many examples of companies shifting their electricity supply using renewable power purchase agreements (PPAs), based on cost savings and energy security benefits. Yet this shift is not yet happening at scale across the sector, particularly in the Pilbara, where renewables only represent 2% of generation. The Safeguard Mechanism does not cover Scope 2 emissions of industrial facilities, and so only covers electricity generation when it is integrated with a facility.

Manufacturers have also started signing large-scale PPAs as costs for solar, wind and battery storage have plummeted. These include:

- Steelmaker InfraBuild using PPAs to [progress towards 100% renewables share of electricity](#) to its two electric arc furnace steel plants by 2030.
- Rio Tinto [using renewable PPAs](#) to begin the transition away from fossil fuels at its Gladstone aluminium value chain assets.

It would be worthwhile for the government to consider extending Safeguard Mechanism coverage to Scope 2 emissions to support a broader shift to renewables in industry.