

Department of Industry, Science, and Resources Safeguard Mechanism Taskforce

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Safeguard Mechanism Reform: Consultation Paper

The Australian Energy Council ('AEC') welcomes the opportunity to make a submission to the Safeguard Mechanism Taskforce's Safeguard Mechanism Reform ('Consultation Paper').

The Australian Energy Council is the peak industry body for electricity and downstream natural gas businesses operating in the competitive wholesale and retail energy markets. AEC members generate and sell energy to over 10 million homes and businesses and are major investors in renewable energy generation. The AEC supports reaching net-zero by 2050 as well as a 55 per cent emissions reduction target by 2035 and is committed to delivering the energy transition for the benefit of consumers.

The Safeguard Mechanism is Australia's primary compliance tool for managing Australia's carbon emissions from facilities with emissions greater than 100,000 tCO2-e per annum. To date, the Safeguard Mechanism has not been effective in driving carbon abatement and revisions to it are necessary if Australia is to reach its climate goals under the Paris Agreement. The AEC hopes the revised baselines will incentivise these industrial facilities to contribute their proportionate share to meeting Australia's carbon targets.

Australia's Emissions Trajectory

Each year, the Department of Industry, Science, Energy and Resources (DISER) publishes a ten-year projection for Australia's emissions trajectory. The most recent projections, <u>Australia's Emissions Projections 2021</u>, show that the electricity generation sector is doing almost all of the heavy-lifting, both now and for the course of this decade, to drive Australia's emissions reductions. Emissions in the electricity generation sector are expected to fall by over 55 percent on 2005 levels by 2030. Despite the enormity of this effort, the estimate may even be conservative given previous forecasts have been revised upwards.

¹ Department of Industry, Science, Energy and Resources (DISER) 2021, 'Australia's Emissions Projections 2021', https://www.industry.gov.au/sites/default/files/October%202021/document/australias emissions projections 2021 0.pdf.

² For example, emissions from the electricity sector in 2020 projections were forecasted to be 111 million tonnes in 2030. This has now been revised down to 88 million tonnes.



Table 1: Sectoral breakdown of 2021 projections results to 2030, Mt CO₂-e

| National Greenhouse Gas Inventory | | Projection |
|-----------------------------------|---|---|
| 2005 | 2019 | 2030 |
| 197 | 179 | 88 |
| 82 | 99 | 99 |
| 82 | 100 | 97 |
| 41 | 55 | 56 |
| 86 | 75 | 76 |
| 31 | 32 | 28 |
| 16 | 14 | 11 |
| 89 | -25 | -16 |
| 624 | 529 | 439 |
| | 2005 197 82 82 41 86 31 16 | 2005 2019 197 179 82 99 82 100 41 55 86 75 31 32 16 14 89 -25 |

Note: totals do not sum due to rounding.

Source: DISER

While these projections provide a good news story for the electricity generation sector, the outlook of other sectors is less positive. Key sectors like transport and stationary energy are projected to *increase* their emissions by 2030 and will respectively become the two largest sources of emissions. The inaction in other sectors has some silver lining as it means there is immense opportunity for "low-hanging fruit" emissions reductions that can be immediately taken.

Governments need to develop the right policies to ensure these opportunities are realised efficiently and with minimal disruption. A revised Safeguard Mechanism is critical to this.

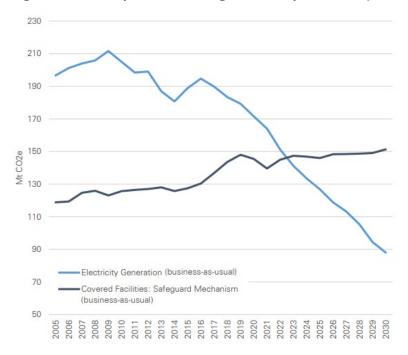
Treatment of electricity sector under the Safeguard Mechanism

Grid-connected electricity generation is subject to a sectoral (rather than individual facility) baseline. This is because output from generators is centrally coordinated to meet demand in real time so in this sense, they act like a single facility. The Consultation Paper states that 'the current approach for grid-connected electricity generators' will 'remain in place', and the Department has further clarified at its Online Information Session on 31 August that there is no intent to adjust the current sectoral baseline.

The AEC supports this position and considers it to be pragmatic and sensible. While the AEC has previously pushed for national trading mechanisms inclusive of electricity (such as the previous government's abandoned National Energy Guarantee), the need for such a scheme now appears unnecessary since the electricity generation sector is already so far advanced in its decarbonisation journey. The figure below illustrates clearly the different emissions trajectories of electricity generation facilities compared to captured safeguard facilities.



Figure 2: Electricity sector vs. Safeguard facility emissions (business as usual)



Source: Reputex

Given how rapidly electricity is decarbonising on its own, and the intent of these reforms is to drive abatement in sectors where there is otherwise limited progress, the scope outlined in the Consultation Paper is sensible. The AEC's view is that policy measures to drive an orderly transition of the electricity generation sector are best achieved outside the Safeguard Mechanism.

Aside from this policy argument, the AEC considers there to be pragmatic reasons for why electricity generation should remain excluded:

- If a revised sectoral baseline was to be exceeded, it means generators will then be subject to individual baselines. In this situation, there is a risk that generators with below-grid average emissions intensity will reduce their dispatch to stay within their individual baseline, only to be replaced by higher emitting generation, and/or potentially compromising energy security and reliability.
- The accelerated rate of decarbonisation in the electricity sector could lead to a flooding of Safeguard Mechanism Credits being awarded, that would ultimately devalue them. It will also lead to a range of convoluted scenarios – for example, should an electricity generation facility that ceases production be awarded SMCs? What if their closure was brought forward partly on environmental grounds?
- The inclusion of electricity might obfuscate the progress of other industrial facilities by providing access to SMCs generated from the decarbonisation of the electricity generation sector and might allow facilities in lagging sectors of the economy to free ride on the efforts of electricity when it comes to meeting the aggregate emissions target.

The AEC understands that there are about six non-grid connected electricity generators that will be captured by these reforms. The AEC suggests that the Department should consider whether these generators are the intended targets of these reforms noting that:

• The reforms aimed at driving abatement at facilities that are otherwise not making progress. For example, at one of the likely captured facilities, Newman Power Station, there has been



- substantial steps to contain its carbon emissions through installation of a battery, reciprocating engines and solar.
- These generators are located in remote areas without obvious alternative supply so it is important any revised baseline does not compromise energy security or reliability.
- These generators may be required to support renewable energy, effectively making them part
 of a larger, lower emissions facility. Penalising them as if they are still individual facilities may
 present inefficient barriers to electrification as a means of decarbonisation.

Electricity sector can help other sectors start their decarbonisation journey

The AEC recently published a series of research papers that explore how lagging sectors like <u>transport</u> and <u>stationary energy</u> can drive down emissions. These two sectors in particularly have economical and readily available abatement options that can be pursued now. This is predominantly in the form of electrification technologies being adopted to power some industrial operations and some transport. This can include activities like light vehicle transportation, steaming, drying, cleaning, and brewing. We recognise that direct electrification is not currently a viable alternative to power higher industrial heat uses (e.g. blast furnaces, alumina refining).³

The AEC considers that baselines should be set to incentivise the uptake of these electrification technologies where appropriate. The current optionality arrangements in place have led to facilities receiving excessive headroom, which creates a lagging effect on new technology uptake. To provide the necessary incentive, the AEC favours certain design elements:

- Baselines should be set in a manner that avoids unreasonable headroom being randomly allocated to some facilities.
- Intertemporal flexibility through measures like banking and borrowing of credits will reduce volatility in the scheme by enabling facilities to manage their emissions more efficiently. There should be some limits on these flexibility arrangements, with access being provided on a facility-by-facility basis and under set circumstances. The Department could consider their application for only activity at industrial facilities that is recognised as high industrial use and hard-to-abate (e.g. a mine with multi-year monitoring could still be expected to show how it is decarbonising its light transport operations to maintain its flexible arrangements).
- A quantitative shortfall charge be enforced on facilities that are non-compliant.

Broadly, the AEC considers that emissions reduction is a collective effort so the Department should, to the extent possible, ensure that the burden is evenly shared across facilities. The AEC accepts the need to maintain international competitiveness, but notes the EITE exemption process is ultimately subjective, and an exemption scheme that is too lenient risks placing disproportionate burden on non-EITE facilities that may not be efficient.

Any questions about this submission should be addressed to Rhys Thomas, by email Rhys.Thomas@energycouncil.com.au or mobile on 0450 150 794.

Yours sincerely,

Rhys Thomas

Policy Adviser Australian Energy Council

³ Noting that the progressive decarbonisation of electricity generation will reduce the emissions intensity of these activities in the medium-to long term.