



AUSTRALIAN PARENTS FOR CLIMATE ACTION

Safeguard Mechanism reform: Our position on proposed changes

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Australian Parents for Climate Action
c/o Environmental Leadership Australia
Level 2, 69 Reservoir Street
Surry Hills NSW 2010

Email: info@ap4ca.org

Australian Parents for Climate Action represents over 17,000 parents, grandparents and carers from across Australia. We are Australia's leading organisation for parents advocating for a safe climate. Our supporters are from across the political spectrum, across all Australian electorates, and from varied socio-economic positions. We seek non-partisan responses to climate change and its impacts.

We advocate for Australian governments and businesses to take urgent action to cut Australia's carbon emissions to net zero as quickly as possible. We encourage Australia to take a leadership role on the world stage, leading by example and calling for other nations to take the necessary action to protect our children's futures.

For more information, visit www.ap4ca.org

This paper was prepared by volunteer David McEwen and has been approved by Nic Seton, Chief Executive Officer of Australian Parents for Climate Action. It is based on a review of the government's [Safeguard Mechanism Reforms Position Paper](#) (January 2023).

Proposed SGM amendments could see industrial emissions increase

Australian Parents for Climate Action is **deeply concerned** that the proposed amendments to the Safeguard Mechanism (SGM) **may not reduce** the 28% of Australia’s **emissions covered by the SGM by the claimed 4.9% per annum and may allow SGM emissions to increase. It sanctions a “pay to pollute” mindset rather than genuine emissions reduction, and does nothing to prevent new fossil fuel projects** that are likely to increase emissions within the scheme..

The SGM covers about 215 facilities, each of which emits over 100,000 tonnes of greenhouse emissions per annum. In total these facilities produce about 140 million tonnes (Mt) of emissions per year, representing about 28% of Australia’s total emissions.

In the year ending 30 June 2021 (FY21, the latest available SGM data), the top 5 facilities (by emissions) included four gas export plants (operated by Woodside, Chevron and Inpex) and the Bluescope Port Kembla steel works. Figure 1 shows the breakdown of all facilities by industry, based on their emissions. Gas extraction and coal mines accounted for 56% of emissions covered by the SGM, with aluminium and iron/steel the next largest industries.

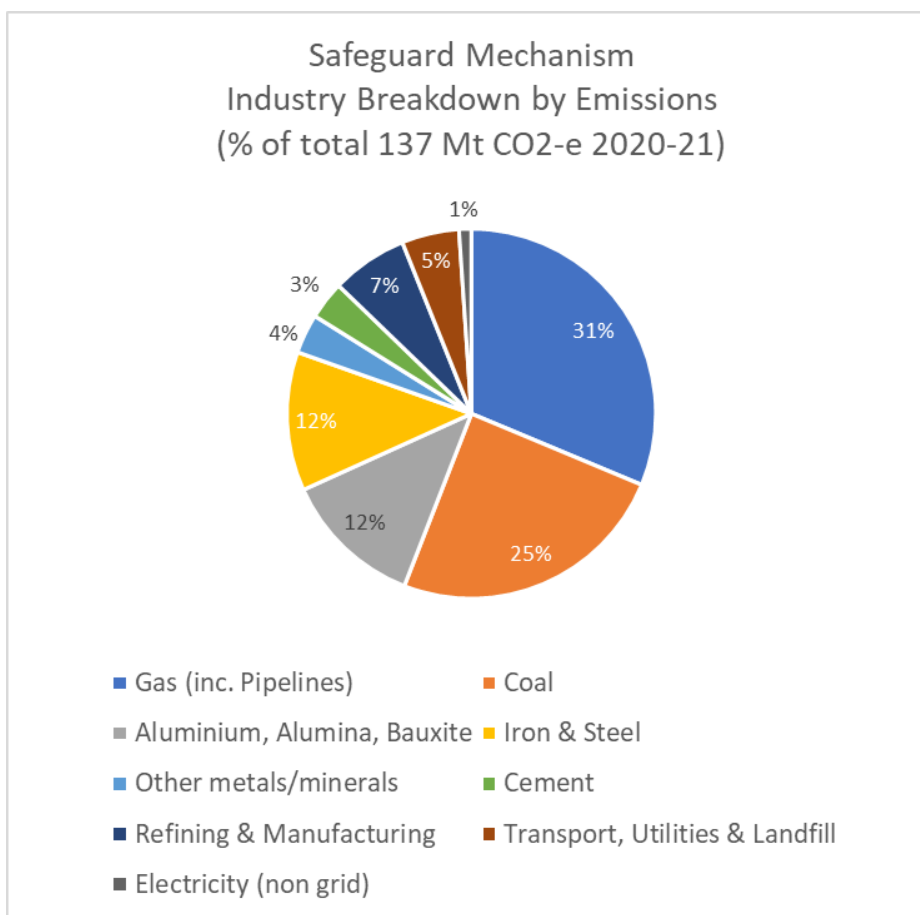


Figure 1 - SGM Emissions Composition by sector (source CER SGM data 2020/21; sectoral breakdown by AP4CA)

Critically, **the SGM only measures facilities' direct emissions (Scope 1)**. It does *not* include emissions associated with the downstream use of the products they produce (e.g. burning gas or coal, which is referred to as Scope 3). **Gas plants have very high direct emissions** due to a combination of fugitive emissions (for example venting of unwanted greenhouse gases such as carbon dioxide from the well), and the fact that, of the gas exported as LNG, about another 10% is used to process, transport and compress it.¹ **Many coal mines also release fugitive methane**, as well as requiring energy for the equipment used for extraction and processing.

The government has no plans to reduce Scope 3 emissions from Australia that are exported overseas. Exported Scope 3 emissions dwarf Australia's total domestic emissions. As the world's third largest fossil fuel exporter, by reducing future supplies (by ceasing to approve new fossil fuel projects), Australia could play an outsized role in reducing global emissions.

The SGM commenced in 2016/17, recording 131 Mt of emissions, which rose by 10% to 144 Mt in the two years to 2018/19, before easing back due to Covid-related disruptions (including temporarily slashing Qantas' emissions by nearly 2 Mt or about 43%) to 137 Mt in 2020/21. By 2022/23 they are projected to be back up to around the previous peak, highlighting that the existing SGM structure has been completely ineffective in terms of emissions reduction.

Clearly, to achieve the 2030 emissions reduction target and net zero by 2050 it is imperative that Australia reduce emissions from mining and heavy industry, which is what the SGM aims to do. And it could work, if loopholes are closed.

Emissions Intensity metric allows a facility's overall emissions to rise

However, under the proposed SGM amendments, emissions reductions are tied to *emissions intensity*: emissions per unit of production (e.g. tonnes of emission per tonne of coal, gas, aluminium, cement, steel, fertiliser, etc. produced by an SGM facility). The intent is that facilities (except those that claim to be "trade exposed," which can negotiate reduced targets) must reduce the emissions intensity of their output by 4.9% per annum to 2030.

A facility that currently produces a million tonnes of emissions based on producing, say 2 million tonnes of coal, by 2024, would need to produce no more than 951,000 tonnes of emissions.

But if that mine meanwhile increases production to 2.2 million tonnes (10% increase), its total emissions in 2024, *incorporating* the 4.9% emissions intensity improvement, would be 1,046,100, an overall *increase* in emissions of 4.6%. **The SGM will allow individual emitters to increase their overall emissions.**

¹ Refer to Table 3 in [Australian Energy Update 2022](#). "LNG Plant Own Use" (433 PJ) / "LNG Exports" (4,314 PJ) means an additional 10% of exported gas is used to produce those exports.

Safeguard mechanism credits can be created even when emissions have risen

To add insult to injury, if that facility exceeded its intensity target and achieved, say, 6% instead of 4.9%, it would be able to generate and trade the proposed Safeguard Mechanism Credits (SMCs) on the excess, including that related to its increased production! In some cases the proposed SGM reforms could incentivise facilities to increase overall emissions even as they are improving their emissions intensity.

No overall cap; no mechanism to restrict aggregate production increases

Astonishingly, **there is no enforceable overall SGM cap**. The government's position paper mentions capping cumulative emissions over the decade between FY21 and FY30 at a cumulative 1,233 MT (for facilities covered by the SGM).

By FY30 the government *expects* SGM emissions to be reduced to 100 Mt per annum from a projected 143 Mt in 2022/23, achieving a notional 30% reduction during the decade.

On the other hand, emissions from the types of facilities covered by the SGM have increased since 2005² – Australia's baseline year for the national 43% off by 2030 target – given the explosion in emissions associated with gas extraction and processing for the LNG export market since about 2015. The SGM target is inadequate in terms of major emitters shouldering their fair share of reductions.

However, in the fine print it appears this is not a cap but **a target with no means of enforcement**. Each facility is proposed to be treated individually. In the absence of a legislated cap, emissions from new facilities will increase overall SGM emissions if production from existing facilities does not decline to match.

Lax requirements for new high emitters

There is **no requirement for new facilities subject to the SGM to commence operations at net zero emissions**, just a vague and undefined requirement for new coal and gas facilities to adopt "international best practice baselines," which haven't been determined yet.

While there are a number of SGM facilities that operate as "going concerns", including steelworks, smelters and the aggregate emissions from major transport operators; many are project based. These may feature development approval conditions covering a certain level of aggregate emissions over the life of, say, a gas well or coal mine (which could be over 40 years³). As such, the composition of the SGM changes from year to year as projects scale up to full capacity; ramp down as the well or mine is exhausted; and experience the commercial realities of changing global demand for their products.

² [Waking the sleeping dragon - why Safeguard Mechanism may soon be tightened | RenewEconomy](#)

³ For example, [WA EPA green-lights Woodside's North West Shelf project to run to 2070](#)

In announcing an aggregate “cap” of 1,233 Mt and target for FY30 of 100 Mt, it would be logical to model projected emissions from all existing facilities, understand the headroom for lifecycle emissions from new facilities, and include an emissions trigger for new approvals. However, **there is apparently no mechanism to prevent new projects from blowing the target.**

Prior to Covid, emissions from SGM facilities grew by 5.4% from FY17 to FY18 and 4.2% from FY19 to FY20. A single new gas facility can add 5% of current safeguard emissions (for example Chevron’s Gorgon facility produced 9 Mt or 6.4% of the emissions covered by the SGM in each of the two years prior to Covid). **Net additions could easily cancel out the 4.9% p.a. emissions intensity reduction target.**

The government’s position paper mentions a “reserve” to accommodate new projects and production increases from existing projects, but the annual 4.9% intensity reduction requirement for individual facilities simply converges on the 100 Mt by 2030 target. There is nothing in the proposed reforms that creates a buffer large enough to accommodate approvals of new fossil fuel mega projects such as are currently in the pipeline.

Indeed, Energy & Resources Insights (ERI), in research commissioned by the Australian Conservation Foundation (ACF), modelled the pipeline of existing and likely (all or most approvals already received) fossil fuel projects versus the government’s proposed SGM target (refer to Figure 2 below) and found that their emissions could significantly crowd out the 100+ existing SGM facilities producing iron and steel, fertiliser, cement, chemicals, glass and so on.⁴

⁴ <https://energyresourceinsights.com/wp-content/uploads/2022/12/Safeguard-mechanism-report-221219.pdf>

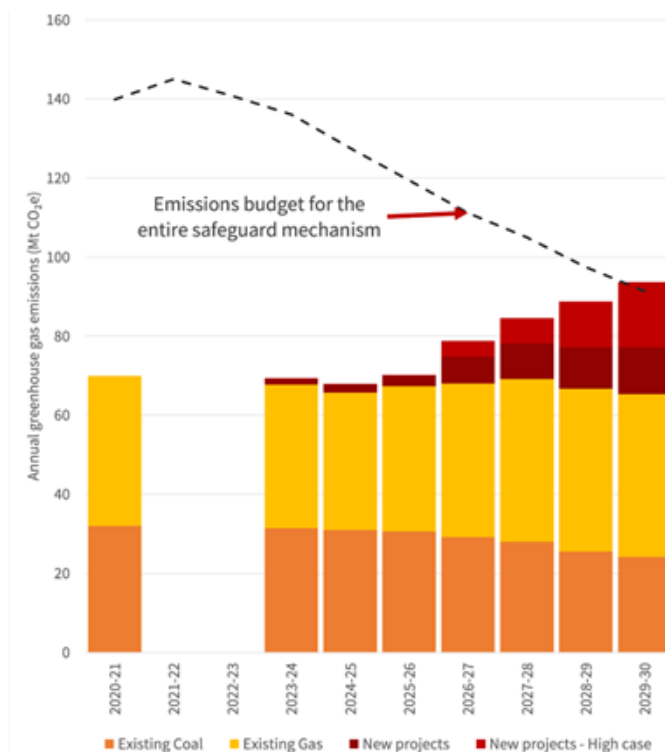


Figure 2 - SGM emissions budget (dashed line; prior to release of position paper) vs projected fossil fuel project emissions associated with existing and likely SGM participants. Note that the government's position paper only seeks to achieve 100 Mt by 2029-30 so the slope of the dashed line is not as steep. ERI's research was conducted before the release of the position paper and does not factor the 4.9% annual emissions intensity improvement requirement.

Use of ACCUs *does not neutralise* SGM facility emissions

The SGM reforms will allow facilities to meet their emissions intensity obligations either:

- through *genuine* emissions intensity reductions at the facility (e.g. switching to renewably produced energy sources; changing processing approaches to emerging low or zero emissions alternatives; etc.); and/or
- by buying Safeguard Mechanism Credits created by other SGM participants who have exceeded the 4.9% per annum emissions intensity target; and/or
- by buying Australian Carbon Credit Units (ACCUs).

Use of ACCUs does not reduce an SGM facility's emissions. A majority of ACCU projects claim to **avoid** emissions. **Most do not remove carbon from the air in an additional and permanent way that would neutralise emissions from the facility.**

To demonstrate: an SGM facility emits 1 tonne more than their emissions intensity threshold allows. They purchase 1 tonne of ACCUs from a project that claims to avoid emissions, the calculation is SGM facility's 1 + avoided ACCU's 0 = 1 tonne of emissions. Nothing has been neutralised.

Further, the recent Chubb Review claimed that the ACCU scheme was essentially sound while recommending a number of important changes. However, the integrity of existing issued ACCUs remains in doubt, and the efficacy of the Review process has also been questioned.⁵

Australian Parents for Climate Action only supports the use of carbon credits for SGM facilities that genuinely and permanently (100 years plus) *remove* carbon dioxide where they can demonstrate high integrity and verifiability.

Australia would be one of the few countries in the world allowing major emitters to pay to pollute. While we absolutely need to halt deforestation and restore biodiversity, if polluters *are* permitted to pay to pollute, it is incumbent upon the government to ensure that by doing so, emissions are genuinely neutralised.

A cap on credit prices risks leaving Australian taxpayers with a hefty bill

The government is proposing to cap the cost of ACCUs that SGM facilities would need to purchase (if they do not meet their targets with genuine emissions). The suggested cap is A\$75 per tonne, with anything over this covered by the government (i.e. the taxpayer). This cap is quite low, considering the fact that global regulated carbon markets are already trading close to or higher than this level. For example, European credits are (at the time of writing) EUR88 (A\$137); New Zealand NZD73 (A\$67); California USD29 (A\$42).⁶ This means that it is quite likely that taxpayers will be picking up a substantial bill.

Due to the lead time (and in some cases the technical infeasibility) to achieve genuine emissions reductions (two decades and many billions of taxpayer dollars wasted on failed carbon capture and storage projects being a case in point⁷), in the early years most of the 4.9% p.a. emissions reduction in the SGM will need to be met through the purchase of ACCUs. Based on the starting point, that means increasing the supply of available credits by 6-7 million every year (**by 2030, 43 million new credits per annum would be required unless SGM participants were producing significantly less or had implemented genuine emissions reductions**). As of the latest data from the Clean Energy Regulator (which inexplicably is dated 30 September 2019), there were just 5.3 million ACCUs available.⁸

Where will all these additional carbon credits come from, given current supply has been in the 10 million to 15 million range per annum, a reasonable percentage of which were of the “avoided deforestation” method, which has now – rightly – been banned as a result of the Chubb Review?

⁵ [Chubb review of Australia's carbon credit scheme falls short – and problems will continue to fester](#)

⁶ [Live Carbon Prices Today](#), downloaded 7 February 2023

⁷ [As carbon capture, storage commitments near \\$4b, what are the options for heavy industry? - ABC News](#)

⁸ [Australian carbon credit unit supply](#)

Regulated demand for credits of the magnitude required by the SGM reforms may exceed ACCU supply and push the price above A\$75 (from the current \$37⁹ and peak – prior to the price collapse associated with revelations regarding the scheme’s integrity – of \$57 in January 2022¹⁰) in which case Australian taxpayers foot the bill for the excess. If they reached current EU prices, **Australian taxpayers could wind up subsidising their purchase by billions of dollars in 2030 alone**, a bill which would continue to increase every year!

The priority must be on genuine emissions reduction of SGM facility emissions

Allowing SGM facilities un-capped use of carbon credits to meet their obligations under the proposed reform sends a clear message that genuine emissions reduction is not important. **It sanctions a “pay to pollute” mindset and will increase the likelihood of exhausting the supply of high quality credits and/or sending the cost of credits well above the \$75 cap.** Taxpayers (including parents like us) would be forced to pick up the bill for every dollar above the cap.

It would also position Australia as an outlier amongst countries that have regulated carbon pricing schemes. Based on research by the Australian Centre for Corporate Responsibility, only Kazakhstan allows regulated entities to meet 100% of their emissions reduction obligations by buying credits. **In countries such as New Zealand, UK, the EU and Switzerland, China, South Korea and Mexico, use of credits is either forbidden entirely, or is limited to no more than 10% of the entity’s obligation.**¹¹

We strongly recommend that the reform mandates an increasing proportion of each year’s intensity reduction target be met via each facility’s Scope 1 (on site) emissions reductions, with use of ACCUs *strictly* limited, and no price cap.

Carbon credits must be reserved for genuinely hard to abate sectors

The IPCC has modelled the need for billions of tonnes (globally) of carbon dioxide *removal* (CDR) by 2050 to keep hopes of achieving the Paris Agreement’s objectives – a survivable future for humanity – alive, given the need to neutralise emissions from genuinely hard to abate sectors that provide a societal benefit.¹² Reiterating: the use of *avoidance* credits *does not neutralise* a facility’s emissions.

At its simplest, CDR can be achieved with tree planting. However, as we have seen in various parts of the world including Australia, trees lack permanence (they burn, die, or are harvested and eventually break down after a period of use as a piece of toilet or news paper or somewhat longer in a building, in each case releasing their stored carbon back into the atmosphere) and may lack additionality. Carbon soil credits are equally unreliable.

⁹ [Certificate Prices - Demand Manager](#), downloaded 7 February 2023

¹⁰ [1. Australian carbon credit units \(ACCU\)](#)

¹¹ Australian Centre for Corporate Responsibility’s submission to the Senate Standing Committee on Environment and Communication’s consultation regarding the Safeguard Mechanism (Crediting) Amendment Bill 2022 [Provisions], downloaded via [Submissions – Parliament of Australia](#)

¹² [Mitigation Pathways Compatible with 1.5°C in the Context of Sustainable Development](#) (p123)

Mechanical capture of carbon atmospheric carbon dioxide (direct air capture) is possible but energy and capital intensive, with existing costs far above the proposed \$75 per tonne price cap.¹³

In any case, the IPCC never anticipated the use of carbon credits in a way that would prolong the use of fossil fuels: they were anticipated for use by genuinely hard to abate activities (generating a clear societal benefit that cannot be met via substitutes). Reiterating the International Energy Agency's stark 2021 warning, **there is no place for new or expanded fossil fuel extraction and infrastructure if the world is to meet the Paris Agreement.**¹⁴

While the reforms provide concessions for so-called trade-exposed facilities, we recommend SGM facilities be prioritised by societal benefit and availability/affordability of low/zero emissions substitutes. Facilities making products that have high social utility and a lack of affordable substitutes should have lower reduction targets and/or get more access to carbon credit markets (or other concessional arrangements) than facilities for which there are cost competitive low/zero emissions substitutes. For example:

- Thermal coal (destined for electricity generation) should have the highest emissions reduction targets, since there are cheaper generation alternatives (renewables).
- Metallurgical (coking) coal (for steel production) has emerging substitutes though prices are not yet competitive.
- Gas for electricity generation still arguably has social utility until zero emissions long duration storage is affordable.
- Gas for building and process heating has clear and affordable substitutes.
- Gas as a chemical feedstock has a clear substitute in most cases (green hydrogen), though the prices are not yet competitive.

Such prioritisations should be reassessed on a regular basis as decarbonisation technologies mature.

Conclusion

Under the proposed reforms, the SGM will remain a bad policy, with **too many loopholes to ensure genuine and substantive levels of aggregate emissions reduction.** Indeed, the fact that industry lobby groups that have long resisted serious efforts to reduce Australia's emissions appear to be largely on-side with the proposed changes suggests they don't go far enough.¹⁵

To be effective, **the SGM must have an enforceable aggregate cap, with the impact of new entrants on achieving the cap a determining factor when new developments are assessed.** An increasing proportion of annual emissions intensity contractions must be met via **genuine Scope 1 emissions reductions, with reducing recourse to ACCUs over time.**

¹³ [Current cost of CO2 capture for carbon removal technologies by sector – Charts – Data & Statistics - IEA](#)

¹⁴ [Net Zero by 2050 - A Roadmap for the Global Energy Sector](#)

¹⁵ [Can the Albanese government finally drive down Australia's emissions? - ABC News](#)

Although the reformed SGM shows many improvements, Australian Parents for Climate Action remains **disappointed by the lack of climate ambition by the federal government, particularly its continued support for the expansion of fossil fuel exports.**