Carbon Market Institute

Safeguard Mechanism FAQs

market brief

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Introduction

Following the 2022 federal election, the new Albanese Government is now implementing its climate policy reform agenda, outlined in Powering Australia.

To achieve its updated, higher-ambition Nationally Determined Contribution (NDC) target under the Paris Agreement, Australia has committed to reduce its greenhouse gas emissions by 43% by 2030, based on 2005 levels, and create a net-zero economy by mid-century. One of the key policies set to facilitate this transition is the enhanced Safeguard Mechanism. The Carbon Market Institute (CMI) supports a more ambitious 2030 target of at least 50% by 2030 and for greater scalability in the enhanced Safeguard Mechanism.

These FAQs, however, will provide historical context alongside an overview of the government's design proposal for the Safeguard Mechanism.

Historical Context

The Safeguard Mechanism was introduced in 2016 following the repeal of the Carbon Pricing Mechanism (CPM) and its replacement with the Emissions Reduction Fund (ERF). Unlike the CPM, which was a business-based emissions trading system (ETS), the ERF operated as a voluntary, taxpayer-funded market for the purchase of Australian Carbon Credit Units (ACCUs). ACCUs are verified under a framework adapted from the CPM. Through the ERF, the federal government pays organisations and individuals who create ACCUs under accredited methodologies for adopting new practices and technologies for reducing emissions.

The Safeguard Mechanism was established to 'safeguard' taxpayer investments in the abatement delivered by the ERF from the growth of Australia's industrial sector and its emissions. Australia's largest emitters were required to measure, manage, and occasionally purchase ACCUs if emission limits, or baselines, were breached. However, a historically flexible approach to setting baselines has allowed emissions from covered industrial facilities to grow under the Safeguard Mechanism, instead of capping or reducing them. Between 2016-17 and 2020-21, emissions covered by the Safeguard Mechanism actually increased by 4.3 per cent.

Following the change of government in 2022, the Safeguard Mechanism reforms are at the centre of the new Labor Government's climate reform agenda. These reforms intend to lift the ambition of the Safeguard Mechanism and guide investment decisions in the industrial sector to drive real and substantial emissions reductions.

1. What is the Safeguard Mechanism?

The Safeguard Mechanism is a set of regulations that apply to large emitters in the industrial sector and require them to address their emissions. It is administered by the Clean Energy Regulator under the National Greenhouse and Energy Reporting Act 2007 (NGER Act).

The Safeguard Mechanism requires industrial facilities to keep their net direct (scope 1) emissions within a limit, called a 'baseline'.

2. Who does the Safeguard Mechanism apply to?

Large industrial facilities with annual production-related emissions (scope 1 emissions) over 100,000 tonnes of CO_2-equivalent are covered by the Safeguard Mechanism. In 2020-21, there were 212 such facilities.

3. What is an emissions 'baseline'?

A baseline is a threshold set by the Clean Energy Regulator (CER) for each facility covered under the Safeguard Mechanism. It puts a limit on an individual facility's net emissions i within a given reporting period.

4. What happens if a facility goes over its emissions baseline/limit?

Facilities that go over their baseline are required to buy and surrender one Australian Carbon Credit Unit (ACCU) for each excess tonne of carbon dioxide equivalent (tCO_2-e). Under the proposed reforms, facilities can also surrender Safeguard Mechanism Credits (SMCs). If a facility fails to do this, it is penalised. See more detail on penalties below.

5. What is the penalty for non-compliance under the Safeguard Mechanism?

Under proposed arrangements, if a facility exceeds its baseline in a reporting year and does not take steps to address this (see FAQ #25), it will be charged $275 for every tCO_2-e by which they exceed their baseline. As well as paying these penalties, a facility must 'make good' on its infraction by purchasing and surrendering equivalent ACCUs or SMCs.

A non-compliant facility with unresolved, excess emissions would also be liable for a civil penalty of $27,500 each day for a maximum of two years.

The Regulator may, at its discretion, issue an infringement notice for an excess emissions situation, requiring them to pay a fine that is no more than a third of the maximum penalty or 150,000 penalty units.

6. Who administers the Safeguard Mechanism?

The Safeguard Mechanism is administered through the National Greenhouse and Energy Reporting Act 2007 (NGER Act) and overseen by the Clean Energy Regulator (CER).

The CER's duties include calculating and setting baselines, collecting and publishing data on the emissions of covered facilities, issuing Safeguard Mechanism Credits (SMCs), and approving discounted decline rates (more detail on discounted decline rates under the Q&As on emissions intensive, trade exposed (EITE) facilities).

7. Why is the government reforming the Safeguard Mechanism?

The government is reforming the Safeguard Mechanism to drive industrial decarbonisation and support industry's own commitment to net zero. In turn, this will support the achievement of Australia's higher-ambition 2030 NDC target of 43% below 2005 levels, which was submitted to the

United Nations Framework Convention on Climate Change (UNFCCC), and net zero 2050 target. Both the 2030 NDC and 2050 net zero targets are enshrined in the Climate Change Act 2022.

8. What is the 'enhanced Safeguard Mechanism'?

The enhanced Safeguard Mechanism refers to how the policy will operate once reforms have taken effect, and its ambition has been scaled up. This enhanced Mechanism will include new design features like declining baselines (i.e., requirement for facilities to reduce their net emissions over time) and Safeguard Mechanism Credits (SMCs – see FAQ #12). These elements are described in further detail below.

9. Is the enhanced Safeguard Mechanism a carbon tax?

No. The enhanced Safeguard Mechanism is not a carbon tax and does not generate revenue for the Government. It is a type of carbon pricing policy called a 'baseline and credit system'). Both a carbon tax and baseline and credit system are types of carbon pricing mechanisms, but they have key differences.

A baseline and credit system works by defining and reducing emissions limits (baselines) for covered entities over time (see FAQ #11 for more detail).

A carbon tax works by setting an explicit tax rate on emissions, usually on each tCO_2-e — it does not set a limit on emissions themselves.

10. When will the enhanced Safeguard Mechanism come into effect?

The enhanced Safeguard Mechanism will come into effect on 1 July 2023, with annual reporting and subsequent 'true up' of delivery of carbon credit units for baseline exceedment to start in February 2025.

11. What is a baseline and credit system?

Similar to an emissions trading scheme (ETS), a baseline and credit system is a policy used to drive emissions reductions by putting a price on the cost of emissions. Covered entities are assigned an emissions limit, or baseline, dictating the amount of greenhouse gases (measured in tCO_2-e) they are allowed to emit. This baseline is determined by the historical emissions of the entities covered—by how much they emitted in previous years.

At the end of a reporting period, usually lasting one financial year, the emissions of each entity are reported and assessed. If an entity fails to meet its baseline, it is penalised and fined. When an entity succeeds at reducing its emissions below the baseline, therefore beating its target, it is rewarded with credits. These can then be traded among covered entities and used to reduce net emissions and meet baselines. Under the enhanced Safeguard Mechanism, these will be called Safeguard Mechanism Credits (SMCs) (see FAQ #12).

12. What are Safeguard Mechanism Credits (SMCs)?

A Safeguard Mechanism Credit, or 'SMC', is a unit issued by the government to facilities which successfully reduce emissions below their baseline. Each credit represents 1 tCO2-e reduced below the baseline, or beyond the facility's legal obligations. These will be determined from annual emissions reporting under the National Greenhouse Emissions Reporting Act 2007 (NGER Act).

SMCs are a tradeable financial product. Companies operating under the Safeguard Mechanism can purchase them from one another and surrender them, as with ACCUs, to reduce their net emissions and meet their baselines. For example, if Facility 1 has earned 5 Safeguard Mechanism Credits, it can choose to sell them to Facility 2 which could then use the 5 credits to meet its baseline. SMCs incentivise covered facilities to not only comply with the Safeguard Mechanism, but to aspire to beat their targets and be rewarded. At the same time, they provide further flexibility for other facilities with less scope for at-source decarbonisation to remain compliant under the reformed Safeguard Mechanism.

Although being a tradable unit, SMCs are not offsets in the same way as ACCUs. This is because SMCs represent in-scheme emissions reductions from the industrial sector. Conversely, ACCUs represent carbon abated in a different sector that is then used to 'offset' emissions in the industrial sector. Moreover, unlike ACCUs – which must meet Offsets Integrity Standards including additionality, where a project must prove carbon abatement would not have happened under business as usual activities – SMCs are subject to compliance requirements of the NGER Act.

13. Are there any limits on the use of carbon credits and offsets?

Recognising some limitations in technology availability or affordability, or time lags between a technology investment and its impact in reducing emissions, the government is not proposing limits on use of ACCUs or SMCs. This could be subject to the scheme's scheduled review in 2026-27.

Although there are no limits on the use of ACCUs or SMCs, the availability of ACCUs and SMCs will be impacted by the anticipated scale of supply. In the case of ACCU offsets, this will depend on a range of factors influencing market development, not least the development of new methods that can bring forward new supply.

The enhanced Safeguard Mechanism is also being implemented in a broader policy ecosystem that includes the Climate Change Authority's annual review, public climate risk disclosure frameworks, and growing investor and community scrutiny. These factors are additional drivers for facilities to invest in at-point decarbonisation, where it is possible.

In the interim, companies that face material technological and financial barriers] to investment in at-source decarbonisation (e.g. fuel switching) could purchase emission reduction investments elsewhere in the economy via carbon credits. In the interim, companies without the means or opportunity to invest in at-source decarbonisation (e.g. fuel switching) would therefore purchase emission reduction investments elsewhere in the economy via carbon credits. The cumulative costs of those investments and the annual decline rate would then be designed to incentivise at-source decarbonisation at the earliest available opportunity. The credibility of the Safeguard Mechanism ultimately will depend on its ability to guide this at-source decarbonisation.

14. What is 'headroom'? Why is it a problem?

When a facility's baseline is set too high and exceeds its actual emissions levels, a gap known as headroom is created. The existence of headroom in the mechanism is the result of the variety of ways that baselines could be calculated and re-calculated under the historical Safeguard mechanism. This facility level headroom has resulted in significant aggregate headroom (summed across all facilities)

as aggregate headroom prevents the introduction of the Safeguard Mechanism Credits. This is because more credits would be created than are needed and credit value would be very low, which limits the incentive for facilities to reduce emissions. To prevent this, the Safeguard Mechanism reforms will seek to 'tighten', or remove, headroom — largely bringing baselines down to current emissions levels.

15. What is meant by 'production-adjusted' framework vs 'absolute' framework?

Under a production-adjusted framework, the baseline of each facility grows and falls with production output. When a facility's output falls short of projections, for example, its baseline is automatically lowered accordingly. Similarly, facilities that exceed their projected output see their baseline proportionally increased.

Such a framework has two main advantages. First, by indexing baselines to production it decouples economic growth from emissions growth. Secondly, it ensures companies cannot meet their baselines by simply cutting or offshoring production. This helps prevent carbon leakage overseas.

An absolute framework, on the other hand, is where baselines do not fluctuate with production. Instead, the framework places a fixed limit on emissions that then declines year on year. It is not adjusted based on production. This provides greater certainty around meeting the scheme's overall emissions reductions target. However, it can lead to unintended consequences in certain economic circumstances; for example, when production decreases drastically due to a recession – such as during the COVID-19 pandemic – a facility falling below its baseline may be credited below-baseline SMCs that reflect broader economic impacts to production demand, rather than changes to production that contribute towards facility-level carbon reductions.

Please note, under the historical Safeguard Mechanism, facilities have been able to apply for a range of baseline types, including: production-adjusted, calculated, benchmark, and reported. Reported and calculated baselines will no longer be available under the enhanced Safeguard Mechanism.

16. What is meant by 'site-specific' or 'facility-specific' baselines vs 'industry average' baselines?

Under a site-specific approach, the baselines for facilities are calculated by multiplying unique, facility-level emissions-intensity values by production metrics. 'Emissions intensity' refers to the volume of tCO2-e generated for each unit of production output. Some favour this method on the premise it will keep initial compliance costs low— that is, if calculated properly, each facility would start with enough baseline to cover its emissions. A disadvantage to this method, however, is the complex administration it would require.

Under an industry-average benchmarks approach, facilities making the same product are held to the same emissions-intensity standard, which is an average value. The standard is then multiplied by the production metrics of each facility to determine individual baselines. Like the site-specific approach, industry-average benchmarks have certain advantages. It would incentivise production to occur at the least emissions-intensive facilities, rewarding those who have already made investments in emissions-reducing facility upgrades with SMCs. It would also make low emitters more competitive within their respective industries. On the other hand, an industry-average benchmarks approach would not capture the unique circumstances of each facility and penalise less emissions-efficient facilities. It will generate uneven compliance costs and may be resented by companies made less competitive.

17. How will facility baselines be calculated under the enhanced Safeguard Mechanism?

Under the enhanced Safeguard Mechanism, baselines will be calculated using a production-adjusted framework.

The government also intends to use a hybrid model combining site-specific and industry-average benchmark approaches. Initially, this will rely more heavily on site-specific emissions-intensity values, but it will gradually weigh more towards industry-average benchmarks. By 2030, it will transition to a fully industry-average benchmarks.

18. What is meant by 'decline rate'?

To ensure facilities covered by the Safeguard Mechanism continually reduce their emissions, baselines will automatically be adjusted, year on year, to decline over time. This means companies will either have to undertake more ambitious decarbonisation or buy more SMCs and ACCUs to meet their baselines.

The rate at which a baseline declines is called a decline rate.

For the first phase of the scheme ending in 2030, the government proposes a 4.9% decline rate to apply to all baselines, with potential exceptions for a limited number of highly trade exposed facilities (see FAQ #19). The decline rate will be linear and cumulative, stacking up each year so that within the first five years it will exceed 20%.

19. How much will the enhanced Safeguard Mechanism reduce emissions by?

The reforms are estimated to reduce emissions by 205 million tCO_2-e by 2030 relative to projected emissions *in the absence of* the reforms. The Minister for Climate Change and Energy, Chris Bowen, has characterised these reductions as being equivalent to taking two thirds of Australia's cars off the road in the same period.

20. What is meant by 'proportional approach'?

Together, facilities covered under the Safeguard Mechanism account for 28% of Australia's total greenhouse gas emissions. A proportional approach would see them contribute the same share to abatement. They would be responsible for 28% of Australia's emissions reductions, towards the 2030 NDC target and net zero 2050 target. This is the government's intended approach for the enhanced Safeguard Mechanism.

21. What is meant by emissions-intensive, trade exposed (EITE)?

The Renewable Energy Target scheme currently includes a definition of emissions-intensive, trade exposed (EITE) facilities. If a facility performs one of the activities listed in its Activity Boundaries—for example methanol production or flat glass production—it qualifies as an EITE facility and hence becomes eligible for concessional treatment under that scheme.

Under the reformed Safeguard Mechanism, the Government intends to take a different approach defining EITE facilities with two categories proposed. This first is a trade-exposed category that includes all facilities whose main output has a trade share above 10%.

The second category is a smaller category called Trade Exposed Baseline Adjusted (TEBA) facilities within the overarching EITE category for those facing an elevated risk of carbon leakage (see definition further down in Q&As). Facilities in this category would be eligible for discounted decline rates. The minimum decline rate they could be assigned is 2% compared to the standard annual decline rate of 4.9% applicable until 2030. A facility will be able to apply for TEBA designation once the cost impact on the facility exceeds 3% of company revenue. A maximum discount value can be applied when the impact metric meets 8%.

22. How many EITE facilities are there under the Safeguard Mechanism?

According to the government consultation paper on the draft Rules that detail the design of the enhanced Safeguard Mechanism, about 80% of current Safeguard-covered facilities fall into the overarching EITE category. This figure is a lot smaller for TEBA EITE facilities (as explained in FAQ #19).

23. What is carbon leakage and why is it a concern?

Carbon leakage is a spill-over effect where emissions reductions in one place are 'cancelled out' by a related hike in emissions elsewhere. In climate policy, this can happen due to policy discrepancy between countries or even between subnational states, which enables emissions-intensive production to relocate to areas without, or with a less stringent, carbon price.

Carbon leakage is a concern for policymakers because it can undermine the desired outcomes of ambitious climate policy. It can undo net reductions in greenhouse gas and, moreover, push emissions-intensive activity beyond the government's jurisdiction.

24. What is a Carbon Border Adjustment Mechanism (CBAM)?

A Carbon Border Adjustment Mechanism (CBAM) is a trade tariff applied to high-emissions imported goods. The tariff is designed to protect a domestic market, where there is a carbon pricing policy, from carbon-intensive products made overseas under a more relaxed regulatory environment.

25. What is the Powering the Regions Fund (PRF) and how does it relate to the enhanced Safeguard Mechanism?

The Powering the Regions Fund (PRF) is a $1.9 billion fund created by the new Labor Government to support the decarbonisation of existing industries and develop Australia's clean energy potential. It has been created with remaining funds in the previous government's Emissions Reduction Fund (ERF). While ERF monies were used solely for contracting least-cost abatement ACCUs, the PRF will fulfil this function as well as three additional priorities:

1. supporting development of new clean energy industries;
2. workforce development and training; and
3. support industrial decarbonisation through the $600 million Safeguard Transformation Stream, which all trade-exposed facilities will be eligible to apply to access. The government is proposing to run this as a competitive grant program.

26. What is meant by 'banking' and 'borrowing'

Instead of selling SMCs to other facilities, facilities that earn SMCs by overachieving on their baseline in a financial year will be able to put aside or 'bank' them. They could then surrender their banked SMCs in future reporting periods and claim them as emissions reductions.

The government proposes unlimited banking of SMCs until 2030, alongside a review of banking arrangements in 2026-27.

Facilities will also be able to adjust their baseline by 'borrowing' from the next compliance year's baseline. However, borrowing is proposed to be restricted such that a facility may only borrow 10% of its baseline and a 10% interest rate is applied. This is to discourage facilities from relying on borrowing. For example, if a facility increases its baseline by borrowing 50 t CO2 e, its baseline in the next compliance year will be reduced by 55 t CO2-e.

27. What is a 'multi-year monitoring period' (MYMP)? Which facilities does this apply to?

A multi-year monitoring period (MYMP) is an option available to facilities seeking to manage baseline responsibilities and potential cleaner technology investments. Upon approval from the government, facilities can extend their reporting period from one financial year to two or even three years. The facility is then permitted to exceed its baseline in one year on the premise that its emissions in the new reporting period remain, on average, below the baseline. Under the historical Safeguard, MYMPs were fairly accessible. However, under the proposed design of the enhanced Mechanism, facilities will only be granted a MYMP if they meet the following conditions:

- A facility exceeds its baseline in the first year of the proposed MYMP period
- They apply with a declaration, signed by the CFO, stating that the technology was not available to allow the facility to avoid exceeding the baseline, but it will become available such that the facility can avoid a cumulative liability if it is granted the MYMP
- Facilities must then demonstrate to the Clean Energy Regulator that they have a pan in place to exceed the MYMP.

Facilities will not be able to generate SMCs while undertaking a multi-year monitoring period, but can elect to reduce the period of the MYMP once they have offset the initial exceedance, if applicable.

28. Can new facilities enter the Safeguard Mechanism? How are they treated?

New facilities with annual emissions of over 100,000 tCO2-e will be automatically covered under the Safeguard Mechanism. Their baselines will be set using a unique approach whereby emissions-intensity benchmarks representing international best practice are multiplied by production metrics. In some cases the international best practice values will need to be adjusted to an Australian context, accounting for local energy sources, raw materials and available technologies.

29. How is the government ensuring new entrants, or expanded production at existing facilities, does not result in enhanced Safeguard Mechanism emissions exceeding the scheme-wide carbon budget?

To protect against higher than expected in scheme-wide net emissions, the government proposes to build a precautionary buffer into the emissions constraint under the enhanced Safeguard Mechanism. This will allow it to hold back some of the scheme's overall emissions budget in a theoretical 'reserve'. The reserve seeks to ensure the budget is not exceeded and is applied equally to all facilities via the decline rate. . It aims to provide a bugger against higher than anticipated production from new and existing facilities, as well as for the flexible treatment of emissions-intensive, trade exposed facilities.

30. What is the cost containment measure?

To manage concerns about price volatility and cost constraints, the government is proposing to create a cost containment measure under the enhanced Safeguard Mechanism, from which facilities will be able to purchase ACCUs at a controlled price when they are unable to meet their baseline by sourcing ACCUs or SMCs on the market and need them for compliance. This price will be $\$75/tCO_2$-e in 2023-24, increasing with CPI plus 2% annually. Funds received through facilities purchasing these ACCUs are proposed to be recommitted to the Powering the Regions Fund and reinvested to support further abatement and decarbonisation.

Some have characterised this as a $75 'price cap' on ACCUs. However, this is not quite correct as it is important to note the following:

- The volume of ACCUs available will be finite delivered through existing ERF contracts from 11 January 2023 and future PRF ACCU purchase contracts;
- This measure will only apply to the enhanced Safeguard Mechanism; the price of ACCUs on the voluntary market, which is continuing to grow as more organisations seek to purchase ACCUs to support their voluntary climate action strategies and targets such as Climate Active carbon neutrality, will not be subject to this measure and voluntary market actors will not be able to purchase ACCUs using the cost containment measure.
- The price point at which facilities can access ACCUs from the cost containment measure is proposed to be reviewed, alongside other design details, in the 2026-27 financial year.

for more information please contact

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The Carbon Market Institute is at the centre of climate change policy and business in Australia. Independent and non-partisan, we bring business, policy makers and thought leaders together to drive the evolution of carbon markets towards a significant and positive impact on climate change.

Engaging leaders, shaping policy and driving action, we're helping business to seize opportunities in the transition to a low carbon economy.

Carbon Market Institute