

# Safeguard Mechanism FAQs

market brief

June 2024



## Introduction

Following the 2022 federal election, the Labor Government lodged a higher-ambition 2030 Nationally Determined Contribution (NDC) target under the Paris Agreement. The new 2030 NDC commits Australia to reduce its greenhouse gas emissions by 43% by 2030, based on 2005 levels. The Climate Change Act 2022 enshrined this 2030 NDC in law, as well as the bipartisan target of net zero emissions by 2050. One of the key policies set to facilitate this transition is the reformed Safeguard Mechanism.

The Carbon Market Institute (CMI) supports more ambitious emissions reductions of at least 50% by 2030 and over 70% by 2035 and continues to advocate for the deepening and broadening of the reformed Safeguard Mechanism to support this.

These FAQs will provide historical context alongside an overview of the reformed 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 cap-and-trade emissions trading system (ETS), the ERF was a voluntary, taxpayer-funded market for the purchase of Australian Carbon Credit Units (ACCUs).

Through the ERF, the Australian Government effectively paid organisations and individuals for adopting new practices and technologies for reducing, avoiding and removing emissions. The Safeguard Mechanism was established to 'safeguard' these taxpayer investments in abatement under the ERF from the growth of Australia's industrial sector and its emissions.

Under the original Safeguard Mechanism, Australia's largest emitters each had an emissions limit, or 'baseline' and were required to measure, manage, and purchase ACCUs if these baselines were breached. However, a historically flexible approach to setting baselines 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 [materially increased by 4.3 per cent](#).

Following the change of government in 2022, the Safeguard Mechanism reforms were at the centre of the new Labor Government's climate reform agenda. These reforms have lifted the ambition of the Safeguard Mechanism and now require covered facilities to not just cap emissions at historical levels, but make investment decisions that support additional abatement and reduce their emissions over time.



## 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 covered industrial facilities to keep their net direct (scope 1) emissions within a limit, called a 'baseline'.

## 2. Who does the Safeguard Mechanism apply to and what is the 'industrial sector'?

The Safeguard Mechanism covers the industrial sector, which collectively refers to high-emitting sub-sectors—including manufacturing, mining, gas, aviation, cement, steel and so on—with annual production-related emissions (scope 1 emissions) over 100,000 tCO<sub>2</sub>-e (tonnes of CO<sub>2</sub>-equivalent). [As of 2022-23](#), there are 219 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 based on the NGER Rules. It puts a limit on an individual facility's net emissions within a given reporting period.

Under current settings, baselines for each facility decline at a flat, linear rate of 4.9% annually from 2021-22 to 2029-30. The decline rate for 2030-31 onwards is yet to be determined but baselines will ultimately decline to net zero in 2049-50.

Emissions baselines under the reformed Safeguard Mechanism are set using a production-adjusted (or 'emissions intensity') framework (see FAQ #15). This means that baselines grow and fall with production output, and it is the intensity of emissions that must decline over time.

## 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) or Safeguard Mechanism Credit (SMC) for each excess tCO<sub>2</sub>-e. If a facility fails to do this, it is penalised. See more detail on penalties (FAQ #5) and SMCs (FAQ #12) below.

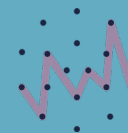
## 5. What is the penalty for non-compliance under the Safeguard Mechanism?

Under current arrangements, if a facility exceeds its baseline in a reporting year and does not take steps to address this (see FAQ #29), it will be charged one penalty unit<sup>1</sup> for every tCO<sub>2</sub>-e over the 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 100 penalty units 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 the lesser of either a third of the maximum penalty a Court could impose, or 150,000 penalty units.

<sup>1</sup>As per the [Crimes Act 1914](#), a Civil Penalty Unit is the value of AUD275, subject to indexation each third 1 July after 1 July 2023.



## 6. Who administers the Safeguard Mechanism?

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

The CER's duties include calculating and setting baselines, collecting and publishing data on the emissions of covered facilities, issuing Safeguard Mechanism Credits (SMCs) (see FAQ #12), and approving discounted decline rates (see FAQ #21).

## 7. Why did the government reform the Safeguard Mechanism?

The government has reformed 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 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 'reformed Safeguard Mechanism'?

The reformed Safeguard Mechanism refers to how the policy has operated since 1 July 2023, when reforms took effect, turning it into a declining baseline and credit emissions trading scheme (ETS). The reformed Safeguard Mechanism includes new design features like declining baselines (i.e., requirement for facilities to reduce their net emissions over time – see FAQ #3) and Safeguard Mechanism Credits (SMCs – see FAQ #12).

## 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 'declining baseline and credit' emissions trading system (ETS). 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<sub>2</sub>-e – it does not necessarily set a limit on emissions.

## 10. When did the reformed Safeguard Mechanism come into effect?

The reformed Safeguard Mechanism came into effect on 1 July 2023. Reporting periods align with the financial year (1 July to 30 June), so with annual reports and subsequent cancellation of ACCUs or SMCs to comply with declining baselines ('true up' period) is in the following February. That means the first 'true up' for facilities under the reformed Safeguard Mechanism will be in February 2025.

## 11. What is a baseline and credit system?

A baseline and credit system is a type of emissions trading system (ETS) that drives emissions reductions by putting a price on the cost of emissions. Covered entities are assigned a baseline dictating the amount of greenhouse gases (measured in tCO<sub>2</sub>-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. Under a declining baseline and credit system, like the reformed Safeguard Mechanism, these limits reduce over time and require entities to reduce their emissions in line with this decline rate.

At the end of a reporting period, usually aligned with the financial year, the emissions of each entity are reported and assessed. If an entity fails to meet its baseline, it is penalised. If an entity reduces its emissions below its baseline, therefore beating its target, it is rewarded with credits. These can then be traded among covered entities and used to meet baselines. Under the enhanced Safeguard Mechanism, these below-baseline credits are 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 Clean Energy Regulator (CER) to facilities that have successfully reduced emissions below their baseline. Each credit represents 1 tCO<sub>2</sub>-e reduced below the baseline, or beyond the facility's legal obligations. These are 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 and Facility 2 has a liability of 5 tCO<sub>2</sub>-e (i.e., it has exceeded its baseline by 5 tCO<sub>2</sub>-e), Facility 1 can sell them to Facility 2, which can then use the 5 credits to meet its baseline.

SMCs incentivise covered facilities to not only comply with the Safeguard Mechanism, but to beat their baselines. At the same time, they provide another avenue alongside ACCUs for covered facilities with less scope for at-point decarbonisation to remain compliant under the reformed Safeguard Mechanism.

Although being a tradable unit, SMCs are not offsets in the same way as ACCUs. Rather, they are emissions permits or allowances. This is because SMCs represent in-scheme emissions reductions from the industrial sector and represent a permit to emit 1 tCO<sub>2</sub>-e. Conversely, ACCUs represent carbon abated in a different sector that is then used to 'offset' emissions in the industrial sector.

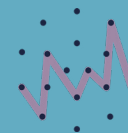
Moreover, ACCUs must meet the Offsets Integrity Standards legislated by the *Carbon Credits (Carbon Farming Initiative) Act 2011* including additionality (where a project must prove carbon abatement would not have happened under business-as-usual activities). SMCs are not subject to additionality or other Offset Integrity Standard requirements, but are instead regulated under the NGER Act.

For further information on SMCs, access our 'SMCs vs. ACCUs' Factsheet [here](#).

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

There are currently no limits on covered facilities' ability to surrender ACCUs or SMCs to meet declining baselines under the reformed Safeguard Mechanism. However, facilities that use ACCUs to meet more than 30% of their baseline must disclose why more onsite abatement has not been undertaken.

Determining an appropriate limit on credits is complicated because of the diversity of covered



facilities, limitations in decarbonisation technology availability (e.g., fuel switching) or affordability for certain sub-sectors, and the reality of time lags between technology investments and their real-time emissions reductions.

Even without limits, the ability of covered facilities to meet their baselines using ACCUs and SMCs will be impacted by the scale of supply. In the case of ACCUs, this will depend on a range of factors influencing market development, including the development of new methods that can bring forward new supply.

Limits to ACCUs and SMCs will be reconsidered as part of the scheme's scheduled review in 2026-27. CMI has proposed vintage restrictions as one way to apply limits to covered facilities' use of ACCUs and SMCs under the Safeguard Mechanism.

#### **14. If there are no limits to the use of credits and offsets, how will the Safeguard Mechanism drive industrial decarbonisation?**

Although there are currently no limits to ACCU and SMC use under the reformed Safeguard Mechanism, total covered emissions must decline over time based on a five-year rolling average. If absolute scheme-wide emissions are not reducing in line with these requirements, the Minister for Climate Change and Energy must report on policy changes needed to address this.

At the individual facility level, while there is no limit on ACCU or SMC use, the cumulative cost of purchasing credits for compliance under the annual decline rate provides an incentive for at-point decarbonisation at the earliest available opportunity.

The reformed 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.

Ultimately, the credibility of the reformed Safeguard Mechanism will depend on its ability to guide facilities' at-point decarbonisation, not just reduce net industrial emissions. Policy settings may be adjusted after the scheduled 2026-27 review to support this outcome.

#### **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 are no longer be available under the reformed 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 tCO<sub>2</sub>-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 can involve.

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. They incentivise production to occur at the least emissions-intensive facilities, rewarding those who have already made investments in emissions-reducing facility upgrades with below-baseline credits. 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.

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

Under the reformed Safeguard Mechanism, baselines are calculated using a production-adjusted framework.

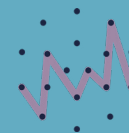
The Government is also using a hybrid model combining site-specific and industry-average benchmark approaches. Initially, this will rely more heavily on site-specific emissions-intensity values, but it will gradually weigh more towards industry-average benchmarks. By 2030, it will fully transition to 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, [a 4.9% decline rate will 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<sub>2</sub>-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 accounted for 28% of Australia's total greenhouse gas emissions in 2020-21.

The Safeguard Mechanism requires covered facilities to deliver a proportional share of Australia's 2030 NDC. To achieve this, net emissions from all Safeguard facilities should not exceed 100 million tCO<sub>2</sub>-e in 2029-30 and zero from 2049-50, and 1,233 million tonnes in total over the decade from 2019-20 to 2029-30.

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

The Renewable Energy Target scheme 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 takes a different approach to defining EITE facilities by using two categories. The first is a trade-exposed category that includes all facilities whose main production variable is trade exposed and whose assessed cost impact for the first financial year is greater than 3% of revenues.

The second category is a smaller category called Trade Exposed Baseline Adjusted (TEBA) facilities. TEBA facilities sit within the overarching EITE category, but face an elevated risk of carbon leakage have therefore been granted a discounted decline rate. The minimum decline rate they could be assigned is 1% compared to the standard annual decline rate of 4.9% applicable until 2030.

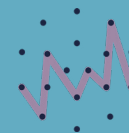
An EITE facility can apply for TEBA designation once the cost impact on the facility exceeds 3% of earnings before interest and tax (EBIT). The minimum baseline decline rate is applicable when the impact metric [meets 8% for non-manufacturing facilities and 10% for manufacturing facilities](#).

## 22. 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.





### **23. 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 with a carbon pricing policy from carbon-intensive products made overseas under a more relaxed regulatory environment by requiring the latter to pay an import tariff.

The world's first CBAM, the European Union CBAM, commenced its transitional phase in 2023 and applies to imported cement, iron and steel, aluminium, fertilisers, electricity and hydrogen products. The full regime is scheduled to begin in 2026.

The Australian Government has commissioned a Carbon Leakage Review to consider approaches to protecting Australian industry from carbon leakage risks and is contemplating a CBAM as a possible solution.

### **24. 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 Australian 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 fund government ACCU purchases 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, a competitive grant program to which all trade-exposed facilities are eligible to apply.

### **25. 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 can put aside or 'bank' them. They can then surrender their banked SMCs in future reporting periods and claim them as emissions reductions. The government will allow unlimited banking of SMCs until 2030, and has pledged to review banking arrangements in the 2026-27 scheduled review.

Facilities are also able to adjust their baseline by 'borrowing' from the next compliance year's baseline. However, borrowing is 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 CO<sub>2</sub>-e, its baseline in the next compliance year will be reduced by an additional 55 t CO<sub>2</sub>-e.

### **26. 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 enhanced Mechanism, facilities are only 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 responsible 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; and
- Facilities must then demonstrate to the Clean Energy Regulator that they have a plan in place to avoid an excess emissions situation.

## **27. Can new facilities enter the Safeguard Mechanism? How are they treated?**

New facilities with annual emissions of over 100,000 tCO<sub>2</sub>-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.

## **28. How does the government ensure new entrants or expanded production at existing facilities do 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 has built 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 buffer against higher than anticipated production from new and existing facilities as well as for the flexible treatment of emissions-intensive, trade exposed facilities.

## **29. What is the cost containment measure?**

To manage concerns about price volatility and cost constraints, the government has created a cost containment measure under the enhanced Safeguard Mechanism, from which facilities can purchase ACCUs at a controlled price if they need credits for compliance and are unable to meet their baseline by sourcing ACCUs or SMCs on the market. Since 11 January 2023, instead of being retired, all ACCUs delivered to the Government under historical ERF contracts have gone into the cost containment measure.

Starting at \$75/tCO<sub>2</sub>-e in 2023-24, the cost containment ACCU price increases annually with CPI plus 2%. Funds paid to the government from facilities purchasing these ACCUs will be recommitted to the Powering the Regions Fund and reinvested to support further abatement and decarbonisation.

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

- The volume of ACCUs available under the cost containment measure is finite;
- The cost containment measure is only accessible to Safeguard-covered facilities; those purchasing ACCUs for other purposes, including to support voluntary climate action and targets, will not have access to the cost containment measure and its price point; and
- 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

Kurt Winter

Director, Corporate Transition

[kurt.winter@carbonmarketinstitute.org](mailto:kurt.winter@carbonmarketinstitute.org)

The Carbon Market Institute (CMI) is a member-based institute accelerating the transition towards a negative emissions, nature positive world. It champions best practice in carbon markets and climate policy, and its 150+ members include primary producers, carbon project developers, Indigenous organisations, legal, technology and advisory services, insurers, banks, investors, corporate entities and emission intensive industries.

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