



May 2024

Safeguard Mechanism

About the Safeguard Mechanism and the reforms

The Safeguard Mechanism applies to facilities that emit more than 100,000 tonnes of carbon dioxide (CO₂) equivalent in a year. It sets legislated targets, known as baselines, on the net greenhouse gas emissions of covered Safeguard facilities. In 2022-23, there were 219 Safeguard facilities covered across the mining, manufacturing, transport, oil, gas and waste sectors. These facilities produce around 30% of Australia's greenhouse gas emissions.

The Safeguard Mechanism was first legislated in 2014 and has been in place since 2016. The Australian Government reformed the Safeguard Mechanism to reduce emissions at Australia's largest industrial facilities, help Australia meet its climate targets and ensure Australia remains competitive in a decarbonising world. The reformed Safeguard Mechanism commenced on 1 July 2023. The reforms apply a decline rate to facilities' baselines so that they are reduced predictably and gradually over time on a trajectory consistent with achieving Australia's emission reduction targets of 43% below 2005 levels by 2030 and net zero by 2050.

Legislation

The legislative framework for the Safeguard Mechanism is set out in the *National Greenhouse and Energy Reporting Act 2007* (the NGER Act). Much of the detail of the Safeguard Mechanism is set out in legislative rules, primarily the *National Greenhouse and Energy Reporting (Safeguard Mechanism) Rule 2015* (the Safeguard Rules). The *Safeguard Mechanism (Crediting) Amendment Bill 2022* (the Amendment Bill) passed both Houses of Parliament on 30 March 2023, amending the NGER Act and other related Acts to provide the underpinning architecture for the reforms. The government subsequently amended the Safeguard Rules and other subordinate legislation in May 2023 to give effect to the reforms. Further amendments to the Safeguard Rules in September 2023 and April 2024 provided additional policy detail, including updates to production variables and setting best practice benchmarks.

Baselines and targets

The emissions reduction task

The Safeguard Mechanism requires covered facilities to deliver a proportional share of Australia's 2030 climate target. To achieve this, net emissions from all Safeguard facilities should not exceed 100 million tonnes of CO₂ equivalent in 2029-30 and zero from 2049-50, and 1,233 million tonnes in total over the decade from 1 July 2020 to 30 June 2030. This will deliver over 200 million tonnes of abatement by the end of the decade.

Safeguard Mechanism

Total emissions from all Safeguard facilities are also required to reduce over time, measured on a 5-year rolling average. From the financial year commencing on 1 July 2024, the rolling average of Safeguard covered emissions over the previous 5 years is required to be lower than the 5-year rolling average from three years earlier, and from 1 July 2027, the 5-year rolling average of Safeguard covered emissions is required to be lower than the 5-year rolling average from two years earlier.

To provide assurance that these emissions reductions are achieved, these emissions targets have been legislated in the objects of the NGER Act. When the Minister makes or amends the Safeguard Rules, they must be satisfied that those rules are consistent with these targets, and take the other objects of the NGER Act into account, and publish their reasons for being satisfied.

The Minister's statements of reasons for each of the amendments to the Safeguard Rules since the passage of the Amendment Bill can be downloaded from the [department's website](#).

Baseline decline rate

Following the reforms, baselines will decline in a predictable and gradual way. The decline rate is set in the Safeguard Rules at 4.9 per cent each year to 2030. The default baseline decline rate applies to all Safeguard facilities, including existing and new facilities, unless a different rate has been approved for a facility as a trade-exposed baseline-adjusted (TEBA) facility.

The default decline rate is consistent with achieving the scheme's 2030 emissions targets, reflecting the final policy design of the Safeguard Mechanism reforms, including expected uptake of the TEBA framework and projected production from existing and new Safeguard facilities. A reserve is built into decline rate to ensure the 2030 targets are met. The reserve accounts for any higher-than-expected production growth at new and existing facilities and any higher-than-expected use of TEBA.

After 2030, decline rates will be set in predictable five-year blocks, consistent with updates to Australia's Nationally Determined Contribution (NDC) under the Paris Agreement. Decline rates for 2030-31 to 2034-35 will be set by 1 July 2027. The process for setting the future decline rates will involve consultation, and take advice from the Climate Change Authority (CCA) and the latest Annual Climate Change Statements to Parliament. To assist industry planning for achieving net zero by 2050, an indicative annual decline rate has been set in the Safeguard Rules at 3.285 per cent from 2030-31 to 2049-50. The actual rate will be confirmed through the 5-year baseline setting process.

Baseline setting

The framework

Safeguard baselines are set using a production-adjusted (intensity) baseline framework. This means baselines increase and fall with production. Production is measured using prescribed production variables (PVs) that are set out in Schedule 1 of the Safeguard Rule, and identify the product or service being delivered, for example tonnes of alumina or passenger kilometres. A facility can have multiple PVs.

A facility's baseline is calculated based on the sum of the quantity of production for each PV multiplied by the relevant emissions intensity value(s) and emissions reduction contribution (ERC). The emissions intensity values used in to calculate a facility's baseline depends on whether it is an existing or new facility. The ERC is the cumulative baseline decline factor in a given year. For example, using the default 4.9% decline rate, the ERC is 0.0951 in 2023-24, 0.902 in 2024-25, and so on.

To support the implementation of the Safeguard Mechanism reforms, PVs were reviewed and updated to ensure a comprehensive set of suitable PVs are in place for setting Safeguard Mechanism baselines.

Baselines for existing facilities

Baselines for existing facilities are set using a hybrid approach initially weighted towards the use of facility-specific emissions intensity values, transitioning to default emissions intensity values by 2030, based on the ratios in Table 1. Default emissions intensity values are set out in Schedule 1 of the Safeguard Rules, and have generally been calculated based on industry average emissions intensity values. Industry average baselines provide an incentive for production to occur where it is least emissions-intensive, while facility-specific baselines recognise individual facility circumstances and keeps initial costs low. By starting the weighting closer to facility-specific values, costs are introduced in manageable increments, giving business sufficient time to plan and implement emissions reduction projects. Existing coal mines have a higher weighting towards facility-specific values, transitioning to a 50:50 split. This approach maintains a robust incentive to reduce the emissions intensity of coal mining operations, while mitigating distributional impacts arising from the differences in emissions intensity across coal mines.

Table 1: Safeguard hybrid baselines: Default and facility-specific emissions intensity baseline ratio

	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
Default : Facility-specific ratio	10:90	20:80	30:70	40:60	60:40	80:20	100:0
Default : Facility-specific ratio (Existing coal mining facilities only)	5:95	10:90	15:85	20:80	30:70	40:60	50:50

Calculating facility-specific emissions intensity values

Existing facilities will apply to the Clean Energy Regulator (CER) to set their facility-specific emissions-intensity values using historic emissions intensity data. The CER will calculate the facility-specific values using the middle three values from five recent years of data (2017-2018 to 2021-22).

Setting baselines for new facilities

All new facilities will have baselines determined using emissions intensity values set using international best practice levels, adapted for an Australian context. This recognises that new facilities have the opportunity to use the latest technology and build world's best practice emissions performance into their design. This sends a strong signal to investors that Australia is serious about net zero, and new investments must support this goal. These baselines will decline over time at the same rate as other facilities. New entrant arrangements commenced on 1 July 2023, consistent with broader Safeguard reforms.

To reduce competitive distortions between new and existing facilities, international best practice also applies at existing Safeguard facilities if they begin producing new products. International best practice does not apply to facilities that trigger the coverage threshold (of 100,000 tonnes) after 1 July 2023, provided commercial production commenced prior to 1 July 2023 (unless they start producing a different product).

New gas fields supplying liquefied natural gas facilities will be given a zero baseline allocation for the reservoir CO₂ in their new fields, given the existence of low-CO₂ fields and opportunities for carbon capture and storage. Projects extracting or exploring a shale gas formation covered by the scheme, including projects within the Beetaloo Basin, are required to have net zero scope 1 emissions consistent with Australian Government commitments to work with the Northern Territory to support its implementation of recommendation 9.8 of the *Scientific Inquiry into Hydraulic Fracturing in the Northern Territory*.

Electricity sector

The Safeguard Mechanism's coverage of the electricity sector did not change under the reforms. It applies a single 'sectoral' baseline across all electricity generators connected to one of Australia's main electricity grids. Individual grid-connected electricity generators are not covered as long as total emissions from grid-connected electricity generators do not exceed the sectoral baseline. The sectoral baseline is set at 198 million tonnes CO₂ equivalent, which is based on electricity sector's emissions from 2009–10 to 2013–14 and is not expected to be exceeded.

Flexible compliance arrangements

The Safeguard Mechanism is designed to incentivise cost-effective abatement. A range of flexible compliance options have been carefully designed to moderate cost impacts to Safeguard facilities and reduce the risk of carbon leakage, without any change to the overall environmental outcome or ability to meet the scheme's emissions budget.

Crediting and trading

Safeguard facilities are able to generate Safeguard Mechanism Credits (SMCs) when their emissions are below their baseline, with the exception of landfills and facilities accessing borrowing arrangements or deemed surrender provisions. Facilities can sell these to other Safeguard facilities to meet their Safeguard compliance obligations or hold them for their future use.

Facilities with emissions that fall below the coverage threshold can continue to receive credits for up to 10 years, as long as they have been previously covered by the Safeguard Mechanism in accordance with the conditions set out in section 58B of the Safeguard Rules. Unlike other facilities, those that opt in to continue receiving credits will have baselines continue to decline below 100,000 tonnes to ensure an equivalent basis for issuing SMCs.

Domestic offsets (ACCUs)

Facilities can also purchase and surrender domestic offsets — in the form of Australian Carbon Credit Units (ACCUs)—to meet their compliance obligations. An ACCU represents one tonne of emissions avoided or sequestered. Each ACCU surrendered by a Safeguard facility reduces its net emissions by one tonne. Access to domestic offsets reduces costs and creates demand for cost-effective emission reductions across the broader economy.

The Safeguard Mechanism provides transparency about facilities' offset use. If a facility surrenders ACCUs equal to or more than 30% of its baseline, it must provide a statement to the CER setting out why more onsite abatement hasn't been undertaken and provides an opportunity for a facility to set out any technological and regulatory barriers to decarbonisation. With the exception of any commercially sensitive material, this statement will be published by the CER.

ACCU projects are not be able to be registered if they would generate ACCUs for reducing covered emissions at Safeguard facilities as it is expected that such projects would be able to create SMCs instead. Projects that are already registered will continue to generate and sell credits for their existing crediting period, however, they are not able to enter into new contracts for government purchase of ACCUs or extend their crediting period. Existing provisions have been retained to prevent double counting of ACCUs and Safeguard facilities from generating ACCUs and SMCs for the same abatement. Existing government-purchase contracts will remain in place, with 'deemed surrender' provisions grandfathered for the full contract term for any Safeguard facility with a Carbon Abatement Contract entered into before the passage of the legislation on 30 March 2023.

Cost containment measure

Facilities that have exceeded their baseline are able to purchase ACCUs from the government at a fixed price of \$75 plus CPI plus 2 per cent in 2023-24, increasing with CPI plus 2 per cent each year. While the government is confident there will be sufficient ACCUs and SMCs available in the market through to 2035 below this price¹, this measure is intended to provide certainty to facilities on the maximum compliance costs they would face. This measure is only available to Safeguard facilities that have exceeded their baseline. The ACCUs available for use in this measure will be sourced from ACCUs that are delivered to government from 12 January 2023 onwards under Carbon Abatement Contracts.

Any funds received from this measure will be allocated to the Powering the Regions Fund (PRF), to support additional abatement to meet Australia's targets.

Banking and borrowing

Unlimited banking of SMCs will be allowed to 2030 to give business flexibility around the timing of their abatement activities. In other words, SMCs can be used for Safeguard compliance in any year to 2030, irrespective of when they are issued. SMCs are personal property and do not expire, their eligibility for use in the Safeguard after 2030 will be considered in the 2026-27 review.

Borrowing of up to 10 per cent of a facility's baseline each year is allowed, with a 10 per cent interest rate applied in the year after borrowing occurs. For the first two years, the interest rate will be reduced to 2 per cent to provide covered businesses time to adjust to the new arrangements and support early investment in onsite abatement. The use of borrowing after 2030 will be considered as part of the 2026-27 review.

Multi-year monitoring period (MYMP)

Five-year multi-year monitoring periods (up to 2030) are available, on application to the CER, where a facility has exceeded its baseline but has a firm and credible plan to undertake an activity to reduce cumulative emissions before the end of the five-year period. MYMP will allow facilities to smooth out abatement trajectories by allowing facilities to average out an exceedance in an initial year (or years) with below-baseline emissions in later years, after a facility has implemented a project.

The application for a MYMP must include a declaration signed by the responsible financial officer that the proposed activity is reasonably likely to result in the facility avoiding a cumulative liability at the end of the relevant period.

If a facility's cumulative emissions exceed its cumulative baseline at the conclusion of the MYMP, it must surrender the required number of ACCUs or SMCs, but no additional penalty is payable. Conversely, if cumulative emissions are below cumulative baselines, the facility may create SMCs.

Compliance dates

Administrative dates for baseline applications and compliance under the Safeguard Mechanism reforms are set out in **Figure 1** below.

Facilities with covered emissions of 1 million tonnes of CO₂ equivalent or more are required to include an audit report when reporting their emissions and production through the NGER Act in October each year.

¹Further information about estimated ACCU supply can be found in the [Australia's emissions projections 2023](#).

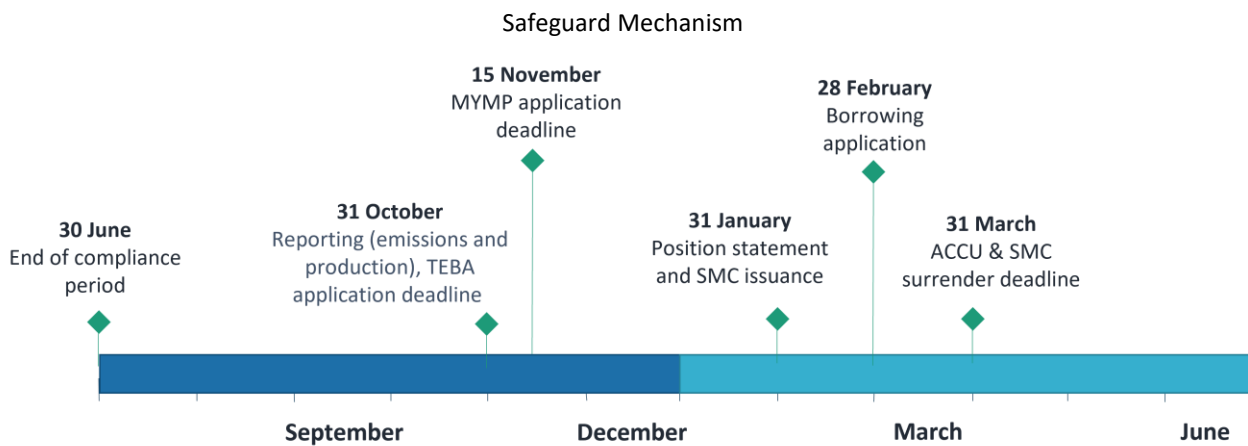


Figure 1: Key compliance dates related to the Safeguard Mechanism for any given financial year.

Tailored treatment for trade-exposed businesses

Tailored treatment for trade-exposed facilities ensures that businesses are not competitively disadvantaged, and that emissions do not ‘leak’ overseas, noting that, in a decarbonising world, competitiveness will increasingly depend on being a low emissions producer. The objects of the NGER Act have been amended to ensure that ‘the competitiveness of trade-exposed industries is appropriately supported as Australia and its regions seize the opportunities of the move to a global net zero economy’ and this Safeguard outcome must be taken into account each time the Safeguard Rules are made or amended.

There are two types of categories of trade-exposed facilities:

- Trade-exposed facilities, which includes all facilities whose main production variable is trade exposed, as set out in Schedule 2 of the Safeguard Rules; and
- Trade-exposed baseline adjusted (TEBA) facilities, which are a subset of trade-exposed facilities facing an elevated risk of carbon leakage.

Trade-exposed facilities are eligible to apply to the CER for TEBA status, which provides the facility a reduced decline rate for 3 years based on a prescribed scheme impact metric. The minimum decline rate and scheme impact metric will differ depending on whether the facility is designated as manufacturing or non-manufacturing.

Manufacturing facilities must use scheme cost as a percentage of facility-level earnings before interest and tax (EBIT) as their scheme impact metric, reflecting the value-added nature of their margins:

- assistance commences at 3% and the minimum baseline decline rate is available when the metric exceeds 10%; and
- the minimum baseline decline rate is 1% each year.

Non-manufacturing facilities use scheme cost as a percentage of facility revenue as their scheme impact metric:

- assistance commences at 3% and the minimum baseline decline rate is available when the metric exceeds 8%; and
- the minimum baseline decline rate is 2% each year.

This assistance has been designed so that it reduces compliance costs for facilities that genuinely need it while retaining an incentive to reduce emissions. Scheme costs for all facilities (manufacturing and non-

Safeguard Mechanism

manufacturing) are determined by multiplying an exceedance in a particular year by the default prescribed unit price. The default prescribed unit price during a financial year will be published in June of that financial year. When applying for a TEBA determination, manufacturing facilities are required to calculate their Earnings Before Interest and Tax (EBIT) consistent with the EBIT guidelines.

The Safeguard Mechanism reforms work alongside other government commitments, such as the PRF and the National Reconstruction Fund, to support Australia's industry to decarbonise and to support regional communities during the transition.

In particular, the PRF's \$600 million Safeguard Transformation Stream supports trade-exposed Safeguard facilities to invest in reducing scope 1 emissions. Applications are open until 1 November 2024 with further information available at: business.gov.au. This complements other competitive grants under the PRF including the \$400 million Critical Inputs to Clean Energy Industries program (now closed) and the \$400 million Industrial Transformation Stream (arena.gov.au).

Landfills

Landfills are covered by the Safeguard Mechanism, but they have different coverage and baseline setting arrangements to other facilities. This is because landfills provide a service, rather than produce an output, and emissions are generated from waste deposited in the past. Only emissions from waste deposited after scheme commencement on 1 July 2016 (known as 'non-legacy waste emissions') are covered under the scheme.

To date only a small number of landfills have been covered, with only a few more likely to be covered in coming years as their non-legacy waste emissions reach 100,000 tonnes CO₂-e. Landfill baselines are set based on methane produced at the facility and assuming capture efficiency rate of 37.2 per cent, which is significant lower than typically achieved by the large landfills covered by the scheme

Given interactions between the review of the landfill gas ACCU method, current ACCU projects, and the Safeguard baseline setting arrangements, landfills are not initially eligible to generate SMCs. A review will be undertaken into the long-term arrangements for landfills prior to the broader 2026-27 review.

Transparency

Publication of Safeguard information

The CER is required to publish the following information reported by Safeguard Mechanism entities for each financial year:

- the amount of covered emissions for the financial year;
- the amount of covered emissions that were methane, carbon dioxide and nitrous oxide for the financial year;
- the baseline emissions number for the financial year;
- the facility's net emissions number;
- the number and type of prescribed carbon units surrendered for that period; and
- the methodology determinations under which any surrendered ACCUs were created.

The CER is required to publicly report on aggregate outcomes from Safeguard facilities for each financial year, including gross emissions, net emissions, the 5 year rolling average and total emissions over financial years since 1 July 2020.

EPBC Act Approvals

The Safeguard Mechanism reforms introduced new requirements for information relating to project approvals under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The Environment Minister is required to pass on information relating to the scope 1 emissions from approvals of new or expanding projects under the EPBC Act that are expected to be new facilities covered by the Safeguard Mechanism or increase emissions from existing Safeguard Mechanism facilities to the Minister for Climate Change, the CCA and the Secretary of the Climate Change Department.

The Secretary is required to advise the Minister for Climate Change if they are satisfied that the Safeguard Rules need amendment to achieve the emissions reduction objectives within the NGER Act. In exercising this power, the Secretary must have regard to information received on approved EPBC projects, information published by the CER, or information provided by another Commonwealth agency or state and territory.

As part of their advice to the Minister's annual climate change statement to Parliament, the CCA will provide advice about whether gross emissions and net emissions are declining consistently with the emissions reduction objectives within the NGER Act, with specific reference to new entrants or expanding projects, and will advise on whether amendments to the Safeguard Rules are required to achieve the emissions reduction objectives.

The Minister for Climate Change will be required to act if emissions are expected to breach the scheme's emissions targets, such as by amending the scheme rules or taking other policy actions. Consultation would need to be undertaken before any amendments to the rules were made.

Compliance and enforcement

Civil penalties

The civil penalty was updated through the reforms so that it reflects both the number of days a facility is in exceedance and the quantity of a facility's excess emissions.

The maximum civil penalty is set at 1 penalty unit per tonne of excess emissions per year and the infringement notice charged at one-third of the maximum civil penalty to a maximum of 150,000 penalty units. As of 1 January 2023, a penalty unit is \$275.

While it is not expected that facilities will fail to comply with the scheme, any penalties paid for non-compliance will be allocated to the PRF, to support additional abatement to meet Australia's targets.

Anti avoidance measures

Anti-avoidance measures prevent a business from defining, or redefining, a facility with the intention of avoiding Safeguard Mechanism obligations. This means an existing facility cannot split into a number of smaller facilities to bring each new facility below the 100,000 tonne coverage threshold.

Facilities are also unable to attach themselves to a grid-connected power station to avoid their obligations. Grid-connected power stations are subject to a sectoral baseline rather than individual emissions limits. The government has clarified that emissions at power stations that do not relate to electricity generation—for example, coal mining emissions—will be covered by the Safeguard Mechanism if they exceed the 100,000 tonnes CO_{2-e} per year coverage threshold.

2026-2027 Review of the Safeguard Mechanism

The government will review Safeguard Mechanism policy settings in 2026-27, to ensure they are appropriately calibrated. The review will consider, among other things, the initial impacts of resetting and declining baselines, including the costs and availability of domestic offsets; the appropriate treatment of international units; the suitability of arrangements for emissions-intensive, trade-exposed activities; whether the cost containment measure is sufficient; and treatment of flexibility mechanisms beyond 2030, such as banking and borrowing and multi-year monitoring periods. The review will also have regard to important issues of sovereign capacity for the transition to net zero, the impacts on recent investments, technology readiness, progress with carbon border adjustment mechanisms and efficiency of Australian production against international competitors.

As part of the review of Safeguard Mechanism scheme settings in 2026-27, the CCA will advise the government on the extent to which on-site abatement is being driven by the reforms, and whether any additional incentives are required (such as a discount on ACCUs when used for more than a certain percentage of a baseline or any circumstances where limits on the use of ACCUs may be appropriate).

More information

Web: www.dcceew.gov.au/climate-change/emissions-reporting/national-greenhouse-energy-reporting-scheme/safeguard-mechanism

Email: Safeguard.Mechanism@dcceew.gov.au