May 2023

**Safeguard Mechanism Reforms**

**About the Safeguard Mechanism and the reforms**

The Safeguard Mechanism applies to facilities that emit more than 100,000 tonnes of carbon dioxide (CO$_2$) equivalent in a year. It sets legislated targets, known as baselines, on the net greenhouse gas emissions of covered Safeguard facilities. There are around 215 Safeguard facilities, across the mining, manufacturing, transport, oil, gas and waste sectors. These facilities produce around 28% of Australia’s greenhouse gas emissions. The Safeguard Mechanism was first legislated in 2014 and has been in place since 2016.

The reforms to the Safeguard Mechanism will reduce emissions at Australia’s largest industrial facilities and maintain their international competitiveness as the world decarbonises. 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.

The final policy settings for Safeguard Mechanism reform have been informed by extensive stakeholder consultation. The *Safeguard Mechanism (Crediting) Amendment Bill 2023* was passed on 30 March 2023. It amends the *National Greenhouse and Energy Reporting Act 2007* (the NGER Act) and other legislation, to establish the framework to give effect to key elements of the reforms, such as introducing credits to the scheme to provide an incentive to facilities to go beyond their baselines. 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 reformed Safeguard Mechanism will commence from 1 July 2023 and legislative rules were registered on 5 May 2023. This factsheet updates the design released on 10 January 2023 in light of consultation and the passage of the enabling legislation.

**Baselines and Targets**

**The emissions reduction task**

The reforms will require large industrial 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 CO$_2$ 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.

There is also a requirement for total emissions from all Safeguard facilities to reduce over time, measured on a 5-year rolling average. From 1 July 2024, the rolling average of Safeguard covered emissions over the previous 5-years are 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 (including for net and total emissions) have been legislated in the objects of the *National Greenhouse and Energy Reporting Act 2007*. When the Minister makes or amends the Safeguard Rules, they must be satisfied that those rules are consistent with these emissions targets, as well as the other Objects of the Act. The Minister will have to publish their reasons for being satisfied.

**Baseline decline rate**

Baselines will decline in a predictable and gradual way from 1 July 2023. The decline rate will be set at 4.9 per cent each year to 2030. This decline rate reflects the final policy design of the Safeguard Mechanism reforms and projected emissions in the absence of the reforms, based on *Australia’s Emissions Projections 2022*, which includes expected emissions from existing and new Safeguard facilities. A reserve has also been built into baseline decline rate calculations to ensure the 2030 target is met. The reserve accounts for any higher-than-expected production growth at new and existing facilities and any higher-than-expected use of the trade exposed baseline adjustments.

This baseline decline rate would apply to all Safeguard facilities, including existing and new facilities, unless a differential trade exposed baseline adjusted facility rate has been approved for a facility. The baseline decline schedule will be set in the Safeguard Rule.

Post-2030 decline rates would be set in predictable five-year blocks, after updates to Australia’s Nationally Determined Contribution (NDC) under the Paris Agreement. Decline rates for 2030-31 to 2034-35 would be set by 1 July 2027. Periodic baseline setting would involve consultation and take advice from the CCA and the latest Annual Climate Change Statements to Parliament. To maintain progress to net zero by 2050, indicative annual decline rates will be set for 2030-31 to 2049-50, noting that the actual rate will be set through the periodic baseline setting process.

**Baseline setting**

*The framework*

The existing production-adjusted (intensity) baseline setting framework will be retained, so baselines grow and fall with production. From the commencement of Safeguard Mechanism reforms in 2023-24, all facilities will be on production-adjusted baselines—reported, calculated and fixed baselines will no longer be available. All facilities will be required to use published, Government-determined production variables.

*Setting baselines for existing facilities*

Baselines for existing facilities will be set using a hybrid model initially weighted towards the use of site-specific emissions intensity values, transitioning to industry average emissions intensity values by 2030, with the following ratios:

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Industry average baselines are more efficient as they provide an incentive for production to occur where emissions are lowest. However, starting close to facilities’ site specific values will mean costs are introduced in manageable increments, giving business sufficient time to plan and implement emissions reduction projects. The hybrid approach will deliver the same emissions reductions, so Safeguard facilities contribute their share of the national emissions target. The approach also removes aggregate headroom, allowing for crediting and trading to begin at scheme commencement.
**Transition from existing arrangements**

In consultation with Safeguard businesses, the Government will finalise and publish remaining production variables and industry average emissions intensity values. It will also review existing production variable definitions to ensure a comprehensive set of suitable production variables is in place when reforms commence on 1 July 2023.

**Calculating site-specific emissions intensity values**

All existing facilities will have a site-specific emissions-intensity value set using historic data. Facilities will need to apply for site-specific emissions-intensity values by 30 April 2024, with the application accompanied by an audit. Auditing of site-specific emissions-intensity values is not required for components of applications that have already been audited for the purposes of a report under the National Greenhouse and Energy Reporting Act 2007. The values would be calculated using the middle three values from the five most recent years of data (2017-2018 to 2021-22). The three years of data will be used to calculate a production-weighted, average emissions intensity value(s) for the facility, noting that any emissions apportioning must be consistent with published production variable definitions.

**Setting baselines for new facilities**

All new facilities will be given baselines set at international best practice levels, adapted for an Australian context. These baselines will decline over time at the same rate as other facilities. This recognises that new facilities have the opportunity to use the latest technology and build world’s best practice emissions performance into their design. New entrant arrangements will commence from 1 July 2023, consistent with broader Safeguard reforms.

To reduce competitive distortions between new and existing facilities, international best practice will also apply at existing Safeguard facilities if they begin producing new products. However, they will not apply to facilities that trigger the coverage threshold (of 100,000 tonnes) after 1 July 2023, but have been operating and reporting under the National Greenhouse and Energy Reporting scheme for some time (unless they start producing a different product).

New gas fields supplying existing liquefied natural gas facilities will be given international best practice baselines for the reservoir CO₂ in their new fields. For these fields’ reservoir CO₂ emissions, best practice is zero given the existence of low-CO₂ fields and opportunities for carbon capture and storage. Shale gas projects within the Beetaloo Basin will be required to have net-zero scope 1 emissions from the outset, consistent with existing Commonwealth 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 applies to the electricity sector in a different way by applying 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**

**Crediting and trading**

Safeguard facilities automatically generate tradeable 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 surrender SMCs to meet their own Safeguard compliance obligations, sell these to other Safeguard facilities to meet their Safeguard compliance obligations or hold them for their future use.

Facilities that fall below the coverage threshold can continue to receive credits for up to 10 years, noting that their baseline will continue to decline, as long as they have been covered by the Safeguard Mechanism for at least three years in the five-year period between 1 July 2017 and 30 June 2022, or at least three years in the five-year period before a facility starts receiving credits while under the coverage threshold. 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.

The final design of the Safeguard Mechanism reforms will provide transparency about facilities’ offset use. If a facility surrenders ACCUs equal to more than 30% of its baseline, it must submit a statement to the CER setting out why onsite abatement hasn’t been undertaken. As part of the review of Safeguard Mechanism scheme settings in 2026-27, the CCA will advise the Government on the extent to which onsite abatement is being driven by the reforms, and whether any additional incentives are required.

Emissions Reduction Fund (ERF) projects that solely reduce covered emissions at Safeguard facilities are no longer be able to be registered. Projects that are already registered will continue to generate and sell credits for their existing crediting period, however, are not able to enter into new contracts for Government purchase of ACCUs or extend their crediting period. Existing government-purchase contracts will remain in place, with ‘deemed surrender’ provisions grandfathered for the full term of the Carbon Abatement Contract for any Safeguard facility with a Carbon Abatement Contract entered into before the passage of the legislation on 30 March.

**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 will be allowed to 2030, 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.

**International units**

International offsets are not proposed to be part of the initial reforms. The Government may consider allowing access to high integrity international offsets at some future time if they are of high integrity and contribute to Australia’s climate targets. The Government intends to consult in late 2023 on the possibility of establishing the legislative framework for international units.
Multi-year monitoring period (MYMP)

Five-year multi-year monitoring periods (up to 2030) will be made available, on application, 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. Facilities will be able to earn SMCs at the end of the extended MYMP.

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.

Cost containment measure

The final design includes a cost containment measure. Facilities that have exceeded their baseline would be able to purchase ACCUs from the Government at a fixed price of $75 in 2023-24, increasing with CPI plus 2 per cent each year. While the Government expects there to be sufficient ACCUs and SMCs available in the market below this price, this measure is intended to prevent excessive prices and to provide certainty to facilities on the maximum compliance costs they would face. This measure will only be available for Safeguard facilities, and only where they 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, to support additional abatement to meet Australia’s targets.

Compliance dates

Administrative dates for baseline applications and compliance are being amended to allow for the Safeguard Mechanism reforms.

Facilities with covered emissions of 1 Mt CO2-e or more are required to include an audit report when reporting their emissions and production through NGER in October each year.

Tailored treatment for emissions-intensive, trade-exposed (EITE) businesses

Tailored treatment for emissions-intensive, trade-exposed (EITE) facilities will be based on the principle of comparative impact—helping to ensure 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 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 rules are made or amended.

There are two types of categories of EITE facilities:

- Trade Exposed facilities, which will include all facilities whose main production variable is trade exposed; and
- Trade Exposed Baseline Adjusted (TEBA) facilities, which are a subset of trade-exposed facilities facing an elevated risk of carbon leakage.

Both categories will be eligible to access the $1.9 billion Powering the Regions Fund (PRF). Within the PRF, the Government will support trade-exposed Safeguard facilities to invest in low emissions technology through the $600 million Safeguard Transformation Stream, and will also support industries providing critical inputs to clean energy industries (including steel, cement, lime, aluminium and alumina) through the $400 million Critical Inputs Fund. New or expanding coal or gas facilities will not be supported through the PRF.

TEBA facilities will be eligible to apply to the Clean Energy Regulator for a discounted decline rate based on a 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 will use scheme cost as a percentage of facility Earnings Before Interest and Taxes (EBIT), reflecting the value-added nature of their margins:

- assistance will commence at 3% and the minimum baseline decline rate will be available at 10%; and
- the minimum baseline decline rate will be 1% each year.

Non-manufacturing facilities will use scheme cost as a percentage of facility revenue:

- assistance will commence at 3% and the minimum baseline decline rate will be available at 8%; and
- the minimum baseline decline rate will be 2% each year.

Scheme costs for all facilities (manufacturing and non-manufacturing) will be determined by multiplying an exceedance in a particular year by the default certificate price. The default certificate price will be published in June of each year.

The reforms to the Safeguard Mechanism will work alongside other Government commitments, such as the Powering the Regions Fund and the National Reconstruction Fund, to support Australia’s industry to decarbonise and to support regional communities during the transition.

**Exploring additional policy options to address carbon leakage**

The Government will undertake a review of additional policy options to address carbon leakage, including considering an Australian carbon border adjustment mechanism (CBAM). This review will
commence in mid-2023. The review will give particular consideration to an Australian CBAM for the steel and cement industry.

**Landfills**

Landfills are currently covered by the Safeguard Mechanism, but they have different coverage and baseline setting arrangements to other facilities—calculated from a default capture efficiency rate of 37.2 per cent. 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 one landfill has been covered by the scheme. A small number of additional landfills are expected to be covered in coming years, as their non-legacy waste emissions reach 100,000 t CO₂-e. Most large landfills capture much more than the capture efficiency rate of 37.2 per cent. Many of the landfills expected to be covered by the scheme capture over 70 per cent of the methane produced at the facilities, and are therefore likely to have net emissions well below their baselines and not be significantly impacted by their baselines declining for several years. Therefore, landfill baselines will decline at the same rate as other facilities.

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

Consistent with other Safeguard Mechanism facilities, landfills covered by the Safeguard Mechanism will be able to continue existing ERF projects that reduce covered emissions and existing ERF contracts, but not register new projects that relate solely to covered emissions, nor extend existing crediting periods, nor enter new government contracts. The Government’s implementation of the Chubb Review will consider how best to update existing methodology determinations for landfill gas ERF projects to ensure the baselines remain appropriate.

**Transparency**

The Clean Energy Regulator (CER) will be required to publish the following information reported by Safeguard Mechanism entities after the end of each year’s compliance deadline:

- 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 under for that period; and
- the methodology determinations under which any surrendered ACCUs were created.

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

As part of their advice to the Minister’s annual climate change statement to Parliament, the Climate Change Authority (CCA) will provide advice on progress against the emissions reduction goals, with
specific reference to new entrants or expanding projects, and advise on whether amendments to the rules are necessary to address this.

The Environment Minister will pass on information relating to the scope 1 emissions from approvals of new or expanding projects under the *Environment Protection and Biodiversity Conservation Act 1999* that are expected to enter the Safeguard Mechanism or increase emissions from existing Safeguard Mechanism facilities, to the Minister for Climate Change, as well as the CCA and the Secretary of the Climate Change Department.

If Safeguard Rules are in place and if the Secretary of the Climate Change Department - based on information from CCA, information published by the CER, or information provided to Secretary by another Commonwealth agency or state and territory - is satisfied the Rules need amendment to achieve emissions objects of the NGER Act, the Secretary is required to advise the Minister.

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.

The *Australian National Registry of Emissions Units Act 2011* has been amended to allow for legislative rules to provide public information about holdings of ACCUs and SMCs. The Government will consult further on options to make such rules to increase transparency in unit holdings and market transparency.

**Compliance and Enforcement**

**Civil penalties**

The civil penalty has been updated so it reflects both the number of days in exceedance and the quantity of excess emissions.

The maximum civil penalty will be 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 Powering the Regions Fund, to support additional abatement to meet Australia’s targets.

**Anti avoidance measures**

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

Facilities will also not be able 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 tonne CO2-e per year coverage threshold.

**2026-2027 Review**

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
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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 CBAMs 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


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Acknowledgement of Country

Our department recognises the First Peoples of this nation and their ongoing connection to culture and country. We acknowledge First Nations Peoples as the Traditional Owners, Custodians and Lore Keepers of the world’s oldest living culture and pay respects to their Elders past, present and emerging.

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This factsheet was republished on 16 November 2023 to correct the start date of the rolling average requirement on page 1 from 1 July 2025 to 1 July 2024.