

Australian Safeguard Mechanism

General Information

ETS Description

The Safeguard Mechanism assigns mandatory facility-level emissions baselines for over 200 large facilities in Australia. It applies to all facilities that emit more than 100,000 tonnes CO₂e of covered emissions in a financial year. Covered entities must surrender credits for emissions that exceed the installation's annual emissions limit (baseline), which is set using an emissions intensity framework.

Facilities emitting above their baseline must offset excess emissions by surrendering Safeguard Mechanism Credits (SMCs) or Australian Carbon Credit Units (ACCU). In some cases, facilities can also apply to average their emissions over a longer period, reduce their baseline decline rate if eligibility criteria are met, or borrow from their baseline from a future year.

The Safeguard Mechanism was introduced in 2016 but had not been classified as a baseline-and-credit system as no tradeable permits were issued. However, following legislative changes passed in March 2023 which took effect as of July 2023, the government is able to issue SMCs to facilities that over-achieve on their baseline. This reform was accompanied by a tightening of baselines and a default decline rate of 4.9% per year, to align the outcome with Australia's 2030 targets and pave the way towards carbon neutrality by 2050. This in effect turned the Safeguard Mechanism into a baseline-and-credit system.

ETS Status

in force

Jurisdictions

Australia

Year in Review

FY2024 was the first full compliance year under the reformed Safeguard Mechanism. Australia's Clean Energy Regulator (CER) issued the first SMCs in February 2025, following emissions reporting for FY2024.

In April 2025, the CER published comprehensive compliance data for FY2024. Of the 219 facilities that were assigned baselines under the Safeguard Mechanism, 62 received a total of 8.3 million SMCs for emissions performance below their baselines, while 7.1 million ACCUs and 1.4 million SMCs were surrendered to meet compliance obligations. The compliance rate was 98%. Covered emissions decreased from 138.7 MtCO₂e in FY2023 to 135.9 MtCO₂e in FY2024, representing a reduction of 2.7 Mt (~1.9%).

Sectoral coverage

Maritime

Mining and extractives

Waste

Domestic Aviation

Transport

Industry

Power

Emissions & Targets

Overall GHG Emissions excl. LULUCF (MtCO₂e)

527.2 MtCO₂e (2023)

GHG reduction targets

By 2030: 43% below 2005 levels (NDC 2.0)

By 2035: 62-70% below 2005 levels (NDC 3.0)

By 2050: Net zero emissions (Updated first NDC)

Australia's GHG reduction targets cover LULUCF and all other sectors, categories and carbon pools, as defined by the IPCC 2006 guidelines, and additional sources reported in Australia's annual National Inventory Report.

Current Allowance Price (per t/CO₂e)

AUD 36.05 (USD 23.23) (average secondary market price 2025)

Size & Phases

Covered emissions (2023)

26.00%

Verified ETS Emissions

138.70MtCO₂e

GHGs covered

CO₂, CH₄, N₂O, SF₆, HFCs, PFCs

Cap or total emissions limit

The total net emissions limit under the Safeguard Mechanism changes as a function of production (output) and is the sum of the bottom-up installation-level emissions limits (baselines) for all individually covered entities. However, the bottom-up emissions limits do not represent an absolute cap.

The facility-level baselines are calculated using output-based benchmarking based on emissions intensity (see 'Allowance Allocation' section). A default decline rate of 4.9% per year applies to standard and landfill baselines up to 2030.

Standard baselines apply to all covered facilities that produce products, whereas landfill baselines are calculated differently and apply exclusively to waste facilities as they provide a service rather than a product.

Net emissions from all Safeguard facilities should not exceed 100 MtCO₂e in FY2030; the total net emissions should not exceed 1,233 MtCO₂e between FY2021 and FY2030; and should reach net zero by FY2050.

Gross emissions from all Safeguard facilities must also reduce over time, measured on a five-year rolling average. Since July 2024, the rolling average of Safeguard-covered emissions over the previous five years must be lower than the five-year rolling average from three years earlier; and from July 2027, the five-year rolling average of Safeguard-covered emissions must be lower than the five-year rolling average from two years prior.

Sectors and thresholds

SECTORS: The Safeguard Mechanism covers all direct (scope 1) GHG emissions from facilities emitting over 100,000 tCO₂e per year. This currently includes around 220 facilities in the mining, manufacturing, domestic transport, oil, gas, and waste sectors.

Grid-connected electricity facilities are covered by a "sectoral" baseline that is not expected to be exceeded and is not declining. Individual grid-connected electricity generators are not covered as long as total emissions do not exceed the sectoral baseline. Grid-connected power sector facilities thus do not face a compliance obligation. Off-grid generators, including electricity generation

integrated into Safeguard facilities, are not covered by the sectoral baseline. Their emissions are reported by the facility.

As for waste, only a very small share of total sectoral emissions (~1%) is covered as the majority of installations do not exceed the coverage threshold.

COVERAGE THRESHOLDS: Facilities and companies with annual scope 1 emissions over 100,000 tCO₂e.

Point of regulation

Point source

Type of entities

Facilities, domestic transport companies (rail/road freight, shipping and aviation)

Number of entities

219 entities (FY2024)

Allowance Allocation & Revenue

Allowance allocation

Under the reformed Safeguard Mechanism, baselines are set using a production adjusted emissions intensity framework. Baselines are initially weighted towards a facility's emissions intensity. However, by 2030, baselines transition to being set based on an industry average emissions intensity value. Baselines for new products produced by existing facilities, as well as all products produced by new facilities, from July 2023 are set using 'best-practice' emissions intensity values.

A sectoral baseline applies to grid-connected electricity generation, based on historical emissions.

For facilities with no other baseline determined or where a baseline of less than 100,000 tCO₂e is calculated, a default of 100,000 tCO₂e is applied.

Facilities that overachieve on their baseline (with the exception of landfills and facilities accessing borrowing arrangements or during a multi-year monitoring period) are issued SMCs that can be banked for future use or sold to other facilities.

Facilities that are considered at risk of carbon leakage ("trade-exposed baseline-adjusted", or TEBA, facilities) can apply for reduced baseline decline rates (see 'Compliance Mechanism' section).

Flexibility & Linking

Offset credits

The use of ACCUs issued under the domestic offset scheme is allowed.

QUALITATIVE LIMITS: Only ACCUs are allowed for compliance.

QUANTITATIVE LIMITS: None. However, if a facility surrenders ACCUs equal to more than 30% of its baseline in a given financial year, it must submit a statement to the CER setting out why more onsite abatement has not been undertaken. This statement is then published on the CER's website.

In FY2024, a total of 7.1 million ACCUs were surrendered for compliance purposes under the Safeguard Mechanism.

Banking and borrowing

Unlimited banking of SMCs is allowed up to 2030. The option to use banked SMCs after 2030 will be considered in the 2026 to 2027 review of the Safeguard Mechanism (see 'Evaluation/ETS review' section).

Borrowing up to 10% of a facility's baseline each year will be allowed until 2030. The facility's baseline would then decrease by a corresponding amount the following year, plus:

- 2% interest for FY2025 and FY2026;
- 10% interest from FY2027 onwards.

Links with other Systems

The Safeguard Mechanism is not linked with any other system.

Other carbon pricing instruments in the jurisdiction

Domestic offsetting mechanisms: Australian Carbon Credit Unit (ACCU) Scheme

Compliance

Compliance mechanism

Covered entities must surrender one compliance unit (SMC or ACCU) per tCO₂e that exceeds the installation's annual emissions baseline, which is set using a production-adjusted emissions intensity framework based on an emissions intensity benchmark.

For existing facilities, baselines are initially set weighted towards a facility's current emissions intensity but, over the years to 2030, baselines will transition to being set based on an industry-average emissions intensity value.

A default decline rate of 4.9% per year applies to the baselines of existing and new facilities until 2030. Post-2030 decline rates will be set in predictable five-year periods, aligned with future updates to the Australian NDC targets. The decline rate is consistent with Australia's emissions projections and includes a 'reserve' to account for higher-than-expected production from both new and existing facilities and greater than expected access to trade-exposed baseline adjustments.

Trade exposed facilities in the manufacturing sector can reduce their decline rate to as low as 1% per year, or 2% per year for other sectors, if they apply for TEBA status and demonstrate that they are at an elevated risk of carbon leakage. TEBA facilities receive the discounted baseline decline rate for three years, with the adjusted decline rate being commensurate with their scheme costs.

In some cases, facilities can apply for a multi-year monitoring period (i.e., multi-year baselines, MYMP) of up to five years to smooth their obligation and abatement trajectories up to 2030. This option is only available where facilities can demonstrate they will undertake on-site abatement to achieve below baseline emissions at the end of the monitoring period.

In the FY2024 compliance period, 26 facilities accessed flexibility measures, including 17 TEBA determinations, six new MYMP declarations, and three borrowing adjustment determinations.

Compliance Period

Annual reporting and compliance

- End of compliance period: June 30
- Reporting deadline: October 31
- SMC issuance: early February in the following year
- Surrendering deadline: March 31 in the following year

Monitoring, Reporting, Verification (MRV)

FRAMEWORK: Emissions monitoring according to the "National Greenhouse and Energy Reporting Act" (NGER Act) 2007.

MONITORING: Monitoring and reporting rules under the Safeguard Mechanism use the framework of the NGER Act. The NGER scheme imposes a single national framework for the reporting of GHG emissions (including scope 1 and scope 2), energy production and energy consumption. Reporting obligations apply for all facilities exceeding the annual inclusion threshold (emissions of at least 25,000 tCO₂e, incl. scope 1 and scope 2 emissions; production of 100 TJ or more of energy; or consumption of 100 TJ or more of energy).

REPORTING: Facilities covered under the Safeguard Mechanism are required to report their emissions annually by October 31 to the CER. Reporting is done digitally through the Emissions and Energy Reporting System (EERS).

VERIFICATION: Verification according to the NGER Act. All facilities with emissions greater than 1 MtCO₂e per year are required to undergo an independent emissions audit each year.

Penalties and enforcement

The maximum civil penalty is set at one penalty unit per tonne of excess emissions per year. As of November 2024, a penalty unit is valued at AUD 330 (USD 213). The infringement notice is charged at one-third of the maximum civil penalty to a maximum of 150,000 penalty units.

Market Regulation

Market Stability Provisions

COST-CONTAINMENT MECHANISM

Instrument type: Set price (rising over time)

Functioning: Safeguard facilities that exceed their baseline may apply to the CER to purchase the required number of ACCUs at a fixed price. The price of these ACCUs is set at AUD 75 (USD 49.90) in FY2024 and will be indexed in future financial years by the Consumer Price Index (CPI) plus an additional 2% per year. This measure is intended to provide certainty to Safeguard facilities about the maximum compliance costs they will face under the reformed scheme.

Market Design

MARKET PARTICIPATION: Compliance entities, non-compliance entities (ACCU project proponents).

MARKET TYPES:

Primary: Allowances are currently not auctioned. SMCs are issued for free to facilities that overperform their baseline.

Secondary: The CER in 2024 launched a new Unit and Certificate registry which consolidates previous unit registers and enables the trading, clearing and settling of ACCUs and SMCs.

LEGAL STATUS OF ALLOWANCES: ACCUs and SMCs are treated as financial products under “Australia’s Corporations Act (2001)”. Certain exemptions apply.

Other Information

Institutions involved

Clean Energy Regulator (CER): Federal authority overseeing the mechanism; tasked with setting baselines, collecting and publishing emissions data, issuing SMCs, and making determinations on borrowing, MYMPs and TEBA applications.

Department of Climate Change, Energy, Environment, and Water (DCCEEW): Federal ministry responsible for climate policy and the Safeguard Mechanism.

Climate Change Authority (CCA): Independent advisory body providing expert advice to the Australian government on climate policy, including the performance of the Safeguard Mechanism.

Regulatory Framework

[National Greenhouse and Energy Reporting Act 2007 \(NGER Act\)](#)

[National Greenhouse and Energy Reporting \(Safeguard Mechanism\) Rule 2015](#)

[Carbon Credits \(Carbon Farming Initiative\) Rule 2015](#)

[Australian National Registry of Emissions Units Act 2011](#)

[Australian National Registry of Emissions Units Regulations 2011](#)

Evaluation / ETS review

The government will review Safeguard Mechanism policy settings over 2026 and 2027, to ensure they are appropriately calibrated and effectively delivering emissions reductions in line with Australia’s targets.

As part of this review, 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. The review will also consider the use of international

Following reforms to the Safeguard Mechanism in 2023, the government reviewed additional policy options to address carbon leakage due to differences in emissions reduction policies between Australia and key trading partners. The review assessed carbon leakage risks and found existing policy measures mitigate leakage risks in the short- to medium-term. The review examined whether further policy measures in the medium to longer term would support a level playing field by ensuring domestic and imported goods face the same emissions reduction obligations in the Australian market.

The review recommended that a border carbon adjustment be introduced for a select group of commodities that are at particular risk of carbon leakage from imports, with it initially covering cement and clinker, and to be considered for other commodities subject to further assessment. The Australian government will give further consideration to the issues and whether to implement a border carbon adjustment in the 2026 to 2027 review of the Safeguard Mechanism.

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