This guide explains Australia’s climate safeguard mechanism, which is an important component of Australian’s central climate change policy, the Emissions Reduction Fund.

**What is the safeguard mechanism?**

The Emissions Reduction Fund is the Australian Government’s central climate change policy tool. The Fund’s objective is to help achieve Australia’s greenhouse gas (GHG) emissions reduction targets of 5% below 2000 levels by 2020 and 26 to 28 per cent below 2005 levels by 2030. The Government has provided $2.55 billion to the Emissions Reduction Fund, with ‘further funding to be considered in future budgets’. The Fund is administered by the Clean Energy Regulator.

The Fund has three key components:

- a voluntary scheme to **credit emissions reductions**, whereby emissions reductions delivered by registered emissions reduction projects using an approved methodology can be issued with credits, known as Australian Carbon Credit Units
- a process to **purchase emissions reductions** (via competitive reverse auctions run by the Clean Energy Regulator, whereby the Regulator enters into contracts with successful bidders) and
- the ‘safeguard mechanism’.

This guide focusses on the last component, the safeguard mechanism, the key aim of which is to ensure that emissions reductions purchased through the Emissions Reduction Fund are not displaced by significant increases in emissions elsewhere in the economy.

The legislative framework for the safeguard mechanism is set out in Part 3H of the National Greenhouse and Energy Reporting Act 2007 (the NGER Act). Part 3H was inserted by the Carbon Farming Initiative Amendment Act 2014, which also established the Emissions Reduction Fund following the repeal of the carbon pricing mechanism. Notably, the safeguard mechanism was the result of amendments put forward by Senator Xenophon and agreed to by the Senate.

Much of the detail relating to the safeguard mechanism is set out in the legislative rules, including the National Greenhouse and Energy Reporting Regulations 2008 and the National Greenhouse and Energy Reporting (Safeguard Mechanism) Rule 2015 (Safeguard Rule). The safeguard mechanism commenced on 1 July 2016.
How does the mechanism work?

Part 3H of the *NGER Act* states that the object of the safeguard mechanism is to ensure ‘that net covered emissions of greenhouse gases from the operation of a designated large facility do not exceed the baseline applicable to the facility’. This statement reveals a number of key concepts that are crucial to the operation of the safeguard, and which are explained further below.

**What does the safeguard mechanism apply to?**

**Only large facilities are covered**

The safeguard mechanism only applies to ‘designated large facilities’. Under section 22XJ of the *NGER Act* and section 8 of the Safeguard Rule, these are facilities where the total direct greenhouse gas emissions from the operation of the facility during a financial year exceed a threshold of more than 100,000 tonnes of carbon dioxide equivalence (t CO₂-e).

This 100,000 tonne threshold limits the coverage of the safeguard mechanism in practice to large-emitting industry sectors such as electricity generation, mining, oil and gas extraction, manufacturing, and waste. However, the cumulative effects of multiple small emitters are not contemplated by the mechanism: in other words, sectors such as agriculture and much of the transport sector (where a large proportion of emissions are from individual light vehicles) are not covered by the mechanism.

As a result of the 100,000 tonne threshold, the mechanism applies to facilities which collectively account for around half of Australia’s GHG emissions. However, as is discussed further later, the electricity sector is treated differently as a result of baselines set under the mechanism.

**The mechanism only covers direct emissions**

The safeguard mechanism applies to facilities with *direct* emissions of more than 100,000 tonnes of carbon dioxide equivalence (t CO₂-e) a year. Only direct or *scope 1 emissions* are included in this threshold: that is, greenhouse gas emissions released into the atmosphere as a direct result of an activity undertaken at that facility. This includes, for example, direct emissions from fugitive emissions (that is, leaks and other uncontrolled releases) and emissions from fuel combustion, waste disposal and industrial process such as cement and steel making.

Some scope 1 emissions are not covered by the safeguard mechanism. Under section 7 of the Safeguard Rule, these include, for example, legacy emissions from the operation of a landfill facility (that is, emissions from waste deposited at the landfill before 1 July 2016) and emissions which occur in the Greater Sunrise unit area or Joint Petroleum Development Area.

Indirect emissions (known as *scope 2 and 3* emissions) are not included in this threshold. Indirect emissions include, for example, emissions associated with the consumption of electricity produced at a separate facility.

**Obligation to avoid excess emissions**

The safeguard mechanism then requires the ‘responsible emitter’ (that is, a person or entity with operational control of a designated large facility) to ensure that an ‘excess emissions situation’ does not exist in relation to the facility. An ‘excess emissions situation’ is where the net emissions exceed the baseline for the facility for the monitoring period. In other words, designated facilities must keep their net direct emissions within ‘baseline’ levels.

**How are baselines set?**

Baselines are therefore an important feature of the safeguard mechanism as they effectively set limits on GHG emissions. Baselines under the safeguard mechanism are set through
determinations made by the Clean Energy Regulator under the Safeguard Rule. The baseline set for a particular facility depends on the individual circumstances of that facility, such as whether data has been reported for the facility in the past or whether it is a new facility.

Notably, under the safeguard mechanism, baselines can be adjusted or varied in certain circumstances and new facilities may be established, or existing facilities may be expanded, potentially resulting in an overall increase in emissions. It is notable that there is no overall cap on emissions under the safeguard mechanism.

There are several different types of baselines under the mechanism including:

- reported baselines
- calculated baselines
- benchmark baselines
- production-adjusted baselines and
- sectoral baselines.

The different types of baselines are explained further below. At the time of writing, the Government recently consulted on proposed amendments to the Safeguard Rule which would make a number of changes to the baseline-setting process.

**Reported baselines**
Baselines for existing facilities can be set using data already reported under the National Greenhouse and Energy Reporting Scheme. For facilities with five years of reported data under the NGER Act, the baseline is based on the historic high point of emissions reported under the NGER scheme between 2009–10 and 2013–14. These are known as ‘reported baselines’. A reported baseline does not expire and continues to apply unless another baseline is in force.

**Calculated baselines**
Facilities that do not have sufficient historical emissions data to make a reported baseline can apply to the Clean Energy Regulator for a baseline to be calculated on an independent assessment approach. These are known as ‘calculated baselines’. Applications for a calculated baseline must be submitted by certain deadlines, which are set out on the Clean Energy Regulator’s website.

New facilities, facilities that have ‘significantly expanded’ or have ‘inherent emissions variability’ can apply to the Clean Energy Regulator for a calculated baseline. Similarly, facilities for which historical emissions may be a poor indicator of future emissions (because, for example, they do not represent normal business operations) were also able to apply for an ‘initial calculated baseline’. Whether a facility is considered to be new, significantly expanded or has emission variability is determined using criteria set out in the Safeguard Rule. For example, a significant expansion includes increasing the maximum productive capacity of a facility by more than 20 per cent or beginning production of a new product.

Calculated-emissions baselines are set by multiplying the high-point of the estimated annual production by the estimated emissions-intensity of that production (t CO₂-e per unit of production). A calculated-emissions baseline generally remains in place for three years, when it is then replaced by a production-adjusted baseline (see below). Up to 2020, baselines for new investments will be based on an audited emissions forecast provided by the facility operator, with a reconciliation of the estimate against the actual performance of the facility at the end of the forecast period.
**Benchmark baselines**

After 1 July 2020, baselines based on 'best practice' will be applied to new or significantly expanded facilities. These are known as ‘benchmark baselines’, which will be based upon emissions-intensity of production, and will use the best practice for that industry as the guide (that is, the best, least emissions intensive standard for production) and an independently audited forecast of production. A benchmark baseline will generally remain in place for three years.

**Production-adjusted baselines**

Both calculated baselines and benchmark baselines are determined using forecasts of production and, once they expire, can be replaced with a **production-adjusted baseline** that reflects actual production from the facility.

A production-adjusted baseline is calculated in the same way as a calculated-emissions baseline, except that the formula for a production-adjusted baseline uses the highest **actual** annual production during the three year period instead of using **estimated** production. Production-adjusted baselines do not expire—they are ongoing unless replaced by another baseline.

**Electricity sectoral baseline**

A **single sectoral baseline** has been applied to all electricity generators connected to one of Australia's five main electricity grids (the National Electricity Market, the South West interconnected system, the North West interconnected system, the Darwin to Katherine network and the Mount Isa-Cloncurry supply network). The electricity sector baseline has been set at 198 million tonnes CO$_2$-e. This baseline represents the high-point in annual emissions from the electricity sector between 2009–10 and 2013–14.

This is considerably higher than the total reported scope one emissions from grid-connected generators in 2015–16, which was **179.1 million tonnes CO$_2$-e**. The Government has acknowledged that it does not expect the electricity sector baseline to be breached before 2030. However, in the unlikely event that it is exceeded, individual facility baselines will apply to electricity generators.

**Where can I find information about baselines?**

The Clean Energy Regulator publishes a **safeguard baselines table** which sets out information relating to emissions baseline determinations. At the time of writing, the Clean Energy Regulator had published 409 baseline determinations. Of those, most (333) are reported baselines.

**What if a facility exceeds its baseline?**

If a facility's emissions exceed (or are expected to exceed) its baseline, the facility operator has a **number of options** available. These include applying to the Clean Energy Regulator for:

- a **calculated baseline** or **variation to their baseline** (as discussed earlier)
- a multi-year monitoring period to allow additional time to reduce emissions. Multi-year monitoring allows a facility to exceed its baseline in one year, as long as average emissions over a two- or three-year period are below the baseline or
- an exemption where emissions are due to ‘exceptional circumstances’ such as a natural disaster or criminal activity.

This significant level of flexibility which allows baselines (or GHG emissions limits) to be readily adjusted has led some critics to question the effectiveness of the safeguard mechanism and whether it will achieve its aim of ensuring that emissions reductions purchased through the ERF
are not displaced by rising emissions elsewhere. The same critics claim that the safeguard mechanism ‘gives the green light’ to increase greenhouse emissions to some enterprises.

**Surrendering carbon credits**

Finally, facility operators can purchase and surrender Australian carbon credit units (ACCUs) to offset emissions and stay below the baseline. The first surrender of ACCUs to the Clean Energy Regulator to avoid excess emissions situations occurred in February 2018. The Regulator’s **safeguard facilities data for 2016–17** indicates that at least 16 facilities (of the 203 facilities covered by the mechanism) surrendered nearly 450,000 ACCUs for compliance with the safeguard mechanism.

In the unlikely event that a facility does exceed its baseline and fails to either seek a baseline adjustment or purchase ACCUs, a number of discretionary, graduated, enforcement options are available to the Clean Energy Regulator. As a ‘last resort’, this includes civil penalties of up to $2.1 million, which may apply to facilities that do not comply with the duty to avoid an ‘excess emissions situation’. However, former Minister for the Environment, Greg Hunt, stated shortly after the commencement of the safeguard mechanism that ‘it is our clear expectation that no businesses will pay penalties’ under the safeguard mechanism. This has certainly been true for the first year of the mechanism’s operation, in which all safeguard facilities successfully managed to avoid an excess emissions situation.

**Reviews of the mechanism**

In 2017, the Government published a review of Australia’s climate change policies, including the Emissions Reduction Fund and safeguard mechanism. In relation to the safeguard mechanism, the review suggested there needed to be greater flexibility in relation to baselines, canvassing options such as ‘broadening access to baseline increases’ and allowing baselines to be ‘regularly updated to reflect actual production’.

The review committed to consult with business on these options with a view to any changes taking effect for the 2018–19 compliance year. The Government published a consultation paper in February 2018 which outlined ‘an approach to make the safeguard mechanism “fairer and simpler” and bring the baselines “up-to-date with current circumstances”’. The Government then released draft amendments to the Safeguard Rule for public consultation. Those amendments would make a number of significant changes to the baseline-setting process to achieve these aims.

Submissions to the consultation paper indicate that industry has largely welcomed the proposed additional flexibility, although at least one business did express concern that the proposals will ‘do little to facilitate the decarbonisation of the Australian economy’. However, some commentators have suggested that allowing facilities to increase their baselines, thereby tolerating increased emissions, would undermine the Emissions Reduction Fund and therefore defeat the purpose of the safeguard mechanism.

The Climate Change Authority is also currently conducting a review of the National Greenhouse and Energy Reporting legislation, which will include an examination of whether the safeguard mechanism is achieving its objectives. This review is due to conclude by 31 December 2018.

**Further resources on the safeguard mechanism**

- Clean Energy Regulator webpages on the safeguard mechanism
- **National Greenhouse and Energy Reporting (Safeguard Mechanism) Rule 2015** (Safeguard Rule)
- Department of the Environment and Energy fact sheets on the safeguard mechanism, available on their ‘Emissions Reduction Fund publication and resources’ webpage.