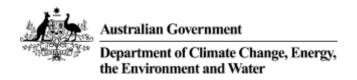
Safeguard Mechanism Reforms

Position Paper

January 2023



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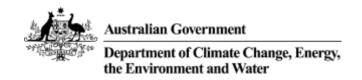
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Executive summary

This paper proposes the design for Safeguard Mechanism reforms based on extensive feedback over nearly six months of consultation with Safeguard businesses, industry associations, environment and community groups, academics and private individuals.

The paper seeks further feedback on the proposed design to deliver emissions reductions consistent with Australia's Nationally Determined Contribution under the Paris Agreement and strengthen Australia's competitiveness in a decarbonising global economy.

The Government has increased the ambition of Australia's 2030 emission reduction target to 43 per cent below 2005 levels by 2030, and affirmed Australia's commitment to net zero emissions by 2050. Parliament has enshrined these targets in law through the *Climate Change Act 2022*. This target was developed collaboratively with and welcomed by businesses, industry organisations, investor groups, trade unions and civil society groups and complements the ambitious targets already established by state and territory governments.

Powering Australia sets out the Government's plan to meet these targets and to support industries and communities through the energy transition—including by building on the existing Safeguard Mechanism to reduce industrial sector emissions. Other elements of the Powering Australia plan are also underway, including the \$20 billion investment in Rewiring the Nation and developing the National Electric Vehicle Strategy.

The Safeguard Mechanism has been in place since 2016. It provides a legislated framework that limits the emissions of around 215 large industrial facilities—covering around 28 per cent of national emissions. Emissions limits for individual facilities are known as baselines. The sum of all facilities' baselines form the overall emissions constraint for the scheme. Building on this framework will promote policy certainty and stability. The Government aims to deliver its climate targets in a cost-effective way that shares the effort across the economy. Safeguard Mechanism reforms have been designed to balance the principles of being effective, equitable, efficient, and simple.

Timing

The Safeguard Mechanism reforms will **commence on 1 July 2023**. The Government proposes Safeguard reforms that would deliver a strong investment signal and a clear trajectory to net zero in 2050, while introducing new obligations in manageable increments and giving businesses flexibility around the timing of their abatement investments.

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.

Targets and baselines

Nominating a specific emissions target for the Safeguard Mechanism in 2030 is an essential first step in policy design. It establishes a clearly-defined pathway for reducing emissions and introduces an important discipline on other policy settings—they must be calibrated to meet the overall target.

Safeguard facilities will deliver a **proportional share of the national 2030 target**¹. This will see net emissions covered by the Safeguard fall from a projected 143 million tonnes in 2022-23 before the reforms start² to no more than 100 million tonnes by 2030³ and capped at 1,233 million tonnes between 2021 and 2030. The reformed Safeguard Mechanism is expected to deliver an estimated 205 million tonnes of abatement by the end of the decade⁴.

How baselines are set determines the individual emissions limit for each Safeguard facility. The Government would retain the existing **production-adjusted (intensity)** baseline framework, which allows baselines to grow and fall with production. This provides policy stability while helping to decouple economic and emissions growth. It also helps to protect against carbon leakage overseas by ensuring baselines cannot be met by reducing production. A reserve would be built into the overall emissions constraint—and applied equally to all facilities—to ensure the 2030 target will be met. The reserve accounts for higher-than-expected production growth from existing and new facilities and trade exposed baseline adjustments.

Consultation revealed diverse views on how baselines should be set for existing facilities, highlighting the complexity of legacy issues stemming from optionality in existing arrangements. Some prefer site-specific baselines, which recognise individual facility circumstances and keep initial costs (exceedance) and benefits (credits) low. Others support industry average benchmarks, which hold facilities producing the same outputs to a common standard, making low emitters more competitive and best supporting the primary policy objective to reduce emissions.

To balance these considerations, the Government is seeking to implement a **hybrid approach**. Baselines would be heavily weighted towards site-specific levels at scheme commencement, and transition to industry average benchmarks by 2030. This ensures long term policy settings are efficient—making use of all available abatement opportunities—while introducing obligations in manageable increments, giving businesses sufficient time to plan and implement emissions reduction projects. The hybrid approach reduces emissions by the same amount as other approaches—delivering a proportional share of national emissions targets to 2030. It also removes aggregate headroom, allowing for crediting and trading to begin at scheme commencement.

New facilities have the opportunity to use the latest technology and build world's best practice emissions performance into their design. Their baselines would be set at **international best practice**, adapted for an Australian context. This sends a strong signal to investors that Australia is serious about net zero, and new investments must support this goal. Noting that international best practice emissions intensity values need further definition, the Government would apply the new entrant definition from 1 July 2023, consistent with commencement of other Safeguard Mechanism reforms.

Flexible compliance arrangements

Ensuring businesses have a range of options available to them to meet their baseline is important to scheme efficiency. It can help reduce compliance costs for Safeguard facilities, without jeopardising

 $^{^1}$ The proportional share has been calculated as 28.14 per cent of the national target—reflecting the Safeguard Mechanism's share of national emissions in 2020-21 (the most recent year data is available). National emissions were 486.57 Mt CO₂-e in 2020-21 and Safeguard covered emissions of 136.94 Mt CO₂-e.

² In the absence of the reforms, emissions from Safeguard facilities are projected to reach 145 Mt in 2023-24.

³ The 100 Mt is based on 28.14 per cent of the national 2030 target of 354 Mt, updated from 99 Mt based on the most recent June 2022 National Greenhouse Gas Inventory Quarterly Update.

⁴ Based on projected emissions from existing Safeguard facilities and expectations around new facilities in the absence of the Safeguard reforms, such that emissions from new facilities are not constrained by a benchmark emissions intensity level. The resulting difference between the projected emissions and baseline trajectory is the level of abatement required by the reforms.

scheme effectiveness—that is, while ensuring the emissions target is met. Under current arrangements, businesses can meet their baseline by reducing emissions on-site or buying and surrendering domestic offsets, in the form of Australian Carbon Credit Unit (ACCUs). Multi-year monitoring is available on application to help facilities manage year-on-year fluctuations in emissions.

The Government will expand access to flexible compliance arrangements by introducing **Safeguard crediting and trading** from 1 July 2023. Safeguard facilities will earn tradable credits when their emissions are below their baseline—that is, for over-performing on their individual emissions limit. This will encourage facilities with low cost abatement to do more. And help businesses whose abatement is more expensive—they can purchase credits from other Safeguard facilities if it is cheaper than reducing their own emissions on-site. This lowers the overall costs to the economy of meeting Australia's climate goals, while delivering the same volume of abatement. Safeguard Mechanism Credits (SMCs) will be automatically generated when emissions are below baselines.

Access to **domestic offsets (ACCUs)** would continue unchanged. This allows businesses to access cost-effective abatement outside the scheme—for example, in agriculture and land management. Implementing the recommendations of the independent review of ACCUs will ensure the integrity of this abatement.

To avoid double counting and integrity issues, Safeguard facilities would no longer generate ACCUs in future, subject to the following transitional arrangements:

- New ERF projects: Emissions Reduction Fund projects that reduce covered emissions at a
 Safeguard facility will no longer be able to be registered to create ACCUs. Safeguard facilities
 can still register projects which do not relate to covered emissions, for example land sector
 projects and projects that reduce electricity use (scope 2 emissions).
- Existing ERF projects: Projects that are already registered that reduce covered emissions at a
 Safeguard facility can continue to generate and sell ACCUs for their existing crediting period,
 but would not be able to enter into new contracts for Government purchase of ACCUs or
 extend their crediting periods. 'Double counting' provisions will be retained to prevent the
 abatement being counted twice.
- Existing government purchase contracts: Existing contracts for Government purchase of ACCUs
 will remain in place, and 'deemed surrender' provisions would be grandfathered for two years.
 This means facilities with existing contracts can continue to sell their ACCUs to the Government
 for the contract duration, but could only count the associated abatement towards their baseline
 for the first two years.

Consultation revealed support from Safeguard facilities for access to high quality **international offsets**. A key consideration for Safeguard reform is to drive the transformation of Australia's economy, including through the domestic carbon market, delivering jobs and enhancing Australia's competitiveness as the world moves to net zero. In response to feedback, the Government will consider the use of international offsets that have high integrity and contribute to Australia's international climate targets. In 2023 the Government will consult on amending legislation that enables high integrity international units to be included in the Australian National Registry of Emissions Units and provide a mechanism for such units to be used for compliance at a future time if warranted.

Arrangements that give businesses flexibility around the timing of their abatement activities can help reduce costs. The Government proposes to provide broad access to **banking and borrowing** arrangements to support inter-temporal flexibility. This includes full banking to 2030 and borrowing up to 10 per cent of their baseline each year. A 10 per cent interest rate is proposed for such borrowing to encourage its use only when it is genuinely needed. To help manage risks associated with banking and borrowing beyond 2030, the Government will consider post-2030 arrangements in the review of the Safeguard Mechanism in 2026-27.

Some facilities may face delays in accessing cost effective abatement technologies to reduce on-site emissions. To support their transition, the Government proposes making **extended multi-year monitoring periods** available, on a facility-by-facility basis by application, to allow a facility's baseline trajectory to match available and emerging technologies within a multi-year compliance period. This gives facilities flexibility around the timing of their abatement, without increasing emissions over the period. Multi-year monitoring periods would not extend beyond 2030, ensuring the 2030 target can reliably be met. Their availability after 2030 will be part of the 2026-27 review.

Consultation revealed widespread concerns about price risks, including from possible supply constraints in the ACCU market. The Government will introduce a **cost containment measure** by selling Government-held ACCUs to give businesses certainty about maximum compliance costs. Any funds received from the sale of ACCUs would be used to support additional decarbonisation. An effective price ceiling would be created by making ACCUs available for purchase by facilities that need them for compliance at \$75 per tonne of CO₂-e in 2023-24, increasing with the CPI plus 2 per cent each year. The cost containment measure will be reviewed in 2026-27.

Flexible compliance arrangements allow facilities to meet their baselines through a combination of on-site and external emission reductions. We expect that between 2024 and 2030, there could be significant opportunities for on-site emission reductions through incremental efficiency improvements and new large-scale technologies. While there is some uncertainty around technological developments and their associated costs, the pace of technological innovation and adoption is expected to gain momentum to 2030, driven by strong incentives provided by the Safeguard reforms as well as external global drivers.

For the remaining abatement task, a sufficient supply of SMCs and ACCUs is expected to be available to meet Safeguard demand, with Safeguard crediting, existing ACCU projects and new ACCU projects all expected to contribute to a growing, liquid market, supporting price stability.

Treatment of emissions-intensive, trade-exposed facilities

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.

There will be two categories of EITE facilities eligible for assistance. The first category—trade-exposed facilities—is broad. It covers around 80% of Safeguard participants using an activity-based assessment—activities that relate to a commodity with a trade share above 10 per cent. The second category—trade-exposed, baseline-adjusted facilities—provides assistance for specific facilities that are trade-exposed and have an elevated risk of carbon leakage due to estimated cost impacts at the facility level. Facilities in the second category can apply for a lower baseline decline rate. The decline rate will reflect the specific impacts faced by each facility and will be locked in for 3 years. Dedicated funding of an initial \$600 million will be available under the Safeguard Transformation Stream of the Powering the Regions Fund to support decarbonisation activities for both categories. Other

opportunities for Safeguard Facilities in the Powering the Regions Fund will be considered further during its design and implementation.

Many stakeholders raised the issue of carbon leakage and identified a **carbon border adjustment mechanism** (CBAM) as their preferred approach for managing trade competitiveness impacts. Some of Australia's trading partners have proposed introducing CBAMs to help ensure trade competitiveness does not compete with decarbonisation objectives. The European Union plans to introduce a CBAM from 2026. A CBAM works by imposing an import tariff and potentially an export rebate on trade with countries without equivalent climate policies. It provides a targeted solution to 'leakage', but faces many design and implementation challenges. Recognising the strong stakeholder interest in the potential use of an Australian CBAM, the Government will undertake a review to explore policy options to further address carbon leakage. The review will consider CBAMs as one of the potential responses to carbon leakage that could complement Safeguard Mechanism reforms and will take into account the interests of our key trading partners.

Baseline decline rates

Baseline decline rates are one of the most important design choice for delivering the emissions target. Baselines will fall in a predictable and gradual way from 1 July 2023, and limit emissions to meet the Safeguard Mechanism's proportional share of national emissions targets. The **decline rate** is proposed to be 4.9 per cent each year to 2030. This 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. This baseline decline approach has been determined in the context of the policy design settings proposed in this paper. Should any policy elements change following this consultation process, the decline rates may need to be reassessed.

Post-2030 decline rates would be set in predictablefive-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. This periodic baseline setting process will include consideration of progress to the current 2030 target and potential adjustment to baseline decline rates for the final two years of the target period. Periodic baseline setting would involve consultation and take advice from the Climate Change Authority and the latest Annual Climate Change Statements to Parliament. To maintain progress to net zero by 2050, indicative annual decline rates would be set for 2030-31 to 2049-50, noting that the actual rate will be set through the periodic baseline setting process.

Process

This position paper outlines the proposed design for Safeguard Mechanism reforms. It incorporates the views of Safeguard businesses, industry associations, environment and community groups, academics and private individuals. These views were put forward in more than 280 submissions to the Safeguard Mechanism Consultation Paper and exposure draft Act amendments; and at workshops and seminars held nationally in August and September 2022.

To facilitate the 1 July 2023 start date, consultation on legislative changes needed to implement the proposed design is being undertaken in parallel:

• **Primary legislation**: exposure draft primary legislative amendments in the form of the *Safeguard Mechanism (Crediting) Amendment Bill 2022*—were released for consultation in October and the Bill was introduced to parliament on 30 November 2022.

• **Subordinate legislation**: an exposure draft of the new subordinate legislation—which will amend the *National Greenhouse and Energy Reporting (Safeguard Mechanism) Rule 2015* (the Safeguard Mechanism Rule) and other required subordinate legislative amendments—has been released alongside this paper for stakeholder review and comment.

The Government invites views and feedback on the proposed design for Safeguard Mechanism reforms set out in this position paper and accompanying exposure draft subordinate legislation. Feedback is open to **24 February 2023**. Feedback on both documents can be provided in a single submission.

The Government will finalise legislative instruments to implement Safeguard Mechanism reforms by April 2023, so the reforms can commence on 1 July 2023.

Summary of proposed policy positions

Targets and baselines

The emissions reduction task

 The Safeguard Mechanism's 2030 target would be set at no more than 100 million tonnes (Mt) in 2030 and 1,233 Mt between 2021 and 2030, representing a proportional share of the national 2030 target and delivering an estimated 205 million tonnes of abatement (relative to current trends) by the end of the decade.

Baseline setting

The framework

- The existing production-adjusted (intensity) baseline setting framework would be retained.
- A reserve would be built into baseline decline rate calculations to ensure the 2030 target is met.
 The reserve would account for higher-than-expected production growth at new and existing facilities and trade exposed baseline adjustments.

Setting baselines for existing facilities

Baselines for existing facilities would be set using a hybrid model initially weighted towards the
use of site-specific emissions intensity values, and transitioning to industry average emissions
intensity values by 2030.

Transition from existing arrangements

- From the commencement of Safeguard Mechanism reforms in 2023-24:
 - all facilities to be on production-adjusted baselines—reported, calculated and fixed baselines will no longer be available;
 - o all facilities to use published, Government-determined production variables.
- In consultation with Safeguard businesses, the Government would:
 - finalise and publish remaining production variables and industry average emissions intensity values; and
 - o review existing production variable definitions to ensure a comprehensive set of suitable production variables is in place when reforms commence.

Calculating site-specific emissions intensity values

- All existing facilities' site-specific emissions-intensity values would be reset using historic data.
- Facilities would need to apply for site-specific emissions-intensity values by 30 April 2024, with the application accompanied by an audit.
- The values would be calculated using the middle two values from the four most recent years of data (2018-19 to 2021-22).
- The two years of data would 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

 New facility baselines would be based on international best practice emissions-intensity benchmarks, adapted for Australian circumstances.

- International best practice would also apply at existing Safeguard Mechanism facilities if they begin producing new products.
- New entrant arrangements would commence from 1 July 2023, consistent with broader Safeguard reforms.
- New facility baselines would be subject to an annual decline rate, consistent with baselines for existing facilities.

Flexible compliance arrangements

Crediting and trading

- Crediting and trading would commence on 1 July 2023, subject to passage of the *Safeguard Mechanism (Crediting) Amendment Bill 2022*.
- All Safeguard Mechanism facilities with emissions below their baseline would be able to generate credits, except landfills and facilities accessing multi-year monitoring periods, borrowing arrangements, and deemed surrender provisions.
- Facilities that fall below the coverage threshold would continue to be eligible to receive credits for five years, noting that their baseline will continue to decline.

Domestic offsets (ACCUs)

- Safeguard Mechanism facilities would be able to continue surrendering domestic offsets—in the form of ACCUs—to meet their compliance obligations.
- ERF projects that reduce covered emissions at Safeguard facilities will no longer be able to be registered.
- Projects that are already registered would continue to generate and sell credits for their existing crediting period, but would not be able to enter into new contracts for Government purchase of ACCUs or extend their crediting period.
- Existing government-purchase contracts would remain in place, with 'deemed surrender' provisions grandfathered for two years from scheme commencement, then removed.

Banking and borrowing

- Unlimited banking of SMCs would be allowed to 2030. In other words, SMCs could be used for Safeguard compliance in any year to 2030, irrespective of when they are issued.
- Borrowing of up to 10 per cent of the baseline each year would be allowed to 2030, with a 10 per cent interest rate applied in the year after borrowing occurs.
- The 2026-27 Safeguard Mechanism review will consider post-2030 arrangements for banking and borrowing.

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 and will
consult in 2023 on the possibility of establishing the legislative framework for international
units.

Emerging technologies

• Five year multi-year monitoring periods (up to 2030) would be available where a facility has exceeded its baseline due to a lack of available technology, but has a firm and credible plan in place to reduce cumulative emissions before the end of the five year period.

Cost containment measure

• A cost containment measure would make Government-held ACCUs available at \$75 per tonne of CO₂-e in 2023-24, increasing with the CPI plus 2 per cent.

Compliance dates

 Administrative dates for baseline applications and compliance would be amended and added to accommodate Safeguard Mechanism reforms.

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

- Two categories of facilities would be given access to tailored treatment to manage competitiveness and carbon leakage risks:
 - Trade Exposed facilities, which will include all facilities undertaking a trade exposed activity;
 - Trade Exposed Baseline Adjusted facilities, which are a subset of trade-exposed facilities facing an elevated risk of carbon leakage.
- Both categories will have access to an initial, dedicated \$600 million Safeguard Transformation
 Stream of the Powering the Regions Fund (PRF); and all Safeguard Mechanism facilities will have
 preferential treatment for access to other PRF streams, where they are eligible, such as through
 additional weighting in the criteria for assessment.
- Trade Exposed Baseline Adjusted facilities would be eligible to apply to the Clean Energy Regulator for a discounted decline rate set based on a scheme impact metric. The minimum decline rate would be two per cent each year.
- Costs would be determined by reference to the default certificate price published in June of each year.

Exploring additional policy options to address carbon leakage

• The Government recognises the strong stakeholder interest in an Australian CBAM, as well as the design and implementation challenges, and will undertake a review commencing in 2023 to explore policy options to further address carbon leakage.

Baseline decline rates

- In general, a uniform, 4.9 per cent decline rate would apply to Safeguard Mechanism baselines each year to 2029-30. This delivers an estimated 205 million tonnes of abatement and is calibrated to meet the 1,233 Mt CO₂-e emissions budget and 100 Mt CO₂-e 2030 point target.
- Decline rates for 2030-31 to 2034-35 would be the subject of consultation in 2026-27 following Australia's required NDC update in 2025, and made by 1 July 2027.
- To maintain progress to net zero by 2050, indicative annual decline rates would be set for 2030-31 to 2049-50, noting that the actual rate will need to be set through the periodic baseline setting process.

• Based on the latest information at that stage, baseline decline rates for 2028-29 and 2029-30 may be adjusted by 1 July 2027.

Compliance and enforcement

- The civil penalty, while not expected to be imposed as it will be more expensive than the cost of
 compliance, to be updated so it reflects both the number of days in exceedance and the
 quantity of excess emissions.
- The maximum civil penalty to be set at 1 penalty unit per tonne of excess emissions per year and the infringement notice charge at one-third of the maximum civil penalty to a maximum of 150,000 penalty units. From 1 January 2023, a penalty unit will be \$275.
- Anti-avoidance measures to be introduced to prevent a business from defining, or redefining, a
 facility with the intention of avoiding Safeguard Mechanism obligations.

Landfills

- Given the overlap with ERF projects, treatment of legacy waste and existing baseline arrangements, landfills would not be eligible to generate Safeguard Mechanism Credits from 2023-24 to 2025-26.
- Consistent with other Safeguard Mechanism facilities, landfills covered by the Safeguard
 Mechanism would continue existing ERF projects that reduce covered emissions and existing
 ERF contracts, but not register new projects that relate to covered emissions, nor extend
 existing crediting periods, nor enter new government contracts during this period. Deemed
 surrender provisions would be grandfathered for two years, then removed.
- Landfill baselines would decline at the same rate as other facilities.
- The provision to add ACCUs issued in relation to the ERF project back to the net emissions of the facility would be amended to include only abatement of covered emissions.

How to make a submission

Submissions to this consultation paper and the accompanying exposure draft amendments to the *National Greenhouse and Energy Reporting (Safeguard Mechanism) Rule 2015* can be made via the <u>Department's Consultation Hub</u> and by clicking the "Make a Submission" button. Submissions will be published online after the consultation closes, however stakeholders may request that their submission is kept confidential and not published. The Department will also publish information on the outcome of the consultation on the Consultation Hub.

This consultation will close on Friday 24 February 2023.

1 Introduction

Australia has committed to reduce national emissions to 43 per cent below 2005 levels by 2030, and to net zero emissions by 2050. These targets have been formalised in Australia's updated Nationally Determined Contribution (NDC) under the Paris Agreement⁵, and enshrined in law in the *Climate Change Act*. This places a new discipline and rigour on Australia's climate goals, including by requiring annual updates to Parliament on progress towards achieving our targets.

Australia's new climate targets are achievable but ambitious, and it will take deliberate and sustained effort to meet them. All sectors must play their part. The Government's plan for meeting these targets is set out in the *Powering Australia* plan, which includes Rewiring the Nation, the Powering the Regions Fund, \$3 billion from the National Reconstruction Fund and the National Electric Vehicle Strategy. Alongside new measures for electricity and transport, the plan commits to build on the existing Safeguard Mechanism to reduce industrial sector emissions.

The Safeguard Mechanism provides a legislated framework that limits the emissions of large industrial facilities producing more than 100,000 tonnes carbon dioxide equivalent (t CO_2 -e) each year, covering around 215 facilities. Businesses are familiar with the scheme. It has been operating for six years. Building on the current framework promotes policy certainty and stability and has been identified by a broad coalition of business leaders and groups as the preferred approach to provide policy certainty for large industrial emitters.

Rio Tinto supports the use of a reformed Safeguard Mechanism as part of a suite of policy measures to incentivise genuine industrial abatement.

Rio Tinto

We appreciate the Australian Government's proactive efforts to adopt the Business Council of Australia's recommendation for safeguard facilities to reduce emissions gradually and predictably over time to support international competitiveness and economic growth.

Fortescue Metals

Australia is well placed to benefit from a more sustainable growth path. Green growth will attract new industries and jobs and help to diversify the economy, improving energy security and reducing Australia's vulnerability to external price shocks.

A fair, robust and transparent Safeguard Mechanism ('Mechanism') can support a reduction in Australian emissions, as well as encourage businesses and industries to further innovate and adopt smarter practices and technologies in line with our collective emissions reduction targets.

Woodside

Reducing emissions could also help to protect Australian industry against transition risks arising from global climate action. These include potential trade measures, such as the European Union's proposed Carbon Border Adjustment Mechanism, and reduced access to private capital due to investors limiting their own exposure to carbon risk.

⁵ Australia's Nationally Determined Contribution 2022 (https://unfccc.int/sites/default/files/NDC/2022-06/Australias%20NDC%20June%202022%20Update%20%283%29.pdf)

The Government notes that a clear and credible investment signal is needed to support and accelerate the development of emerging abatement technologies. The proposed Safeguard reforms deliver a strong investment signal and a clear trajectory to net zero in 2050, while ensuring businesses have sufficient time to prepare and adjust. Key elements include:

- a hybrid approach to baseline setting that gradually introduces costs and benefits from scheme commencement to 2030;
- access to new flexibility mechanisms—such as crediting and trading, banking and borrowing, extended multi-year monitoring periods, and a cost containment measure—to reduce costs;
- EITEs assistance—including dedicated funding to support low carbon investments and differentiated decline rates for facilities with an elevated risk of carbon leakage;
- a review in 2026-27 to ensure Safeguard Mechanism reforms are effectively delivering emissions reductions and that scheme settings are operating as intended.

Details of the proposed design are set out in this paper.

1.1 Timing and process

Safeguard Mechanism reforms will commence on 1 July 2023. Existing governance arrangements are strong and Safeguard facilities are already well prepared. They have significant experience measuring and reporting emissions and are already familiar with the Safeguard Mechanism architecture.

Further, the proposed Safeguard Mechanism policy settings have been designed to ensure compliance obligations are introduced in manageable increments, giving businesses sufficient time to plan and act. A review will be undertaken in 2026-27—once two years of post-reform data are available—to assess reform impacts and provide an opportunity to build on and refine the design.

The timeline is set out below (see figure 1.1). It includes two rounds of consultation on policy design, and consultation on legislative changes over nearly six months, including:

- **Primary legislation**: exposure draft primary legislation amendments in the form of the *Safeguard Mechanism (Crediting) Amendment Bill 2022*—were released for consultation in October and the Bill was introduced to Parliament on 30 November 2022.
- **Subordinate legislation**: an exposure draft of subordinate legislation has been released alongside this paper for stakeholder views.

The Government is working to achieve passage of the *Safeguard Mechanism (Crediting) Amendment Bill 2022* and make the Safeguard Mechanism Rule and other subordinate legislative amendments by April 2023, so the reforms can commence on 1 July 2023.

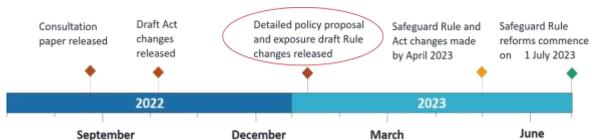


Figure 1.1: Timeline for Safeguard Mechanism reforms

This paper sets out the detailed policy proposals for reforming the Safeguard Mechanism. It reflects views received from stakeholders in response to the Safeguard Mechanism Consultation Paper released in August⁶, and exposure draft Act changes⁷ released in October.

The Government received over 280 submissions to these processes from Safeguard businesses, industry associations, environment and community groups, academics and private individuals. The department also received feedback at seminars and workshops held in a number of states during August and September 2022.

The Government invites views on the proposed design for Safeguard Mechanism reforms set out in this position paper and accompanying exposure draft Safeguard Mechanism Rule and other subordinate legislative amendments, with submissions sought by **24 February 2023**. Feedback on all documents can be provided in a single submission. A table linking the main policy elements to the legislation is at **Attachment A**, followed by a glossary and list of acronyms.

1.2 Objective and policy principles

Consultation revealed a general consensus that the following policy principles effectively balance the Government's objective to deliver its climate targets in a way that maximises benefits, minimises costs and shares the effort among participants, and provides an appropriate basis for designing Safeguard Mechanism reforms:

- **Effective**: reduces emissions consistent with Australia's greenhouse gas emissions reduction targets.
- **Equitable**: baselines are set on a consistent and transparent basis and achieve an equitable distribution of the costs and benefits.
- **Efficient**: allows the market to find the lowest cost abatement wherever it occurs, and encourages production where it is least emissions-intensive.
- **Simple**: makes baseline setting arrangements, and administrative and reporting arrangements, as simple and low cost as possible.

2 The Safeguard Mechanism's share of the national emissions reduction task

The Government has legislated Australia's new climate commitments to reduce national emissions to 43 per cent below 2005 levels by 2030 and achieve net zero by 2050. Safeguard reforms are intended to put facilities on a broad trajectory to net zero by 2050.

Assigning a corresponding target to the Safeguard Mechanism is an essential first step in policy design. It establishes a clearly defined pathway for reducing emissions and introduces an important discipline on other policy settings—they must be calibrated to meet the target.

The Government consulted on basing the Safeguard Mechanism target on its proportional share of national emissions in 2020-21, reducing emissions from 137 Mt in 2020-21 to 99 Mt in 2030, and constraining total emissions to 1,227 Mt CO₂-e over the decade (2021-2030). Consultation revealed a diversity of views, including from those advocating lesser, to those arguing for greater reductions.

⁶ https://consult.dcceew.gov.au/safeguard-mechanism-reform-consultation-paper

⁷ https://consult.dcceew.gov.au/safeguard-mechanism-reform-consultation

The Government acknowledges that the Safeguard Mechanism covers many 'hard-to-abate' sectors—including steel, cement and aluminium—where a large proportion of emissions arise from chemical processes that are difficult to avoid.

However, the proposed reforms do not mandate a regulated emissions outcome for individual facilities, but allow businesses to 'trade' their baselines to access the lowest cost abatement among participants. Together with access to the domestic offset market and other flexibility mechanisms, this reduces costs, while new technologies are being developed.

Further, setting a clear decarbonisation path—with a 2030 target on a trajectory to net zero by 2050—will introduce a credible and stable investment signal to help drive research and development of new technologies and processes. Some are already showing promise. Rio Tinto and Alcoa have worked together to develop the world's first carbon free aluminium smelter in Canada. While not yet commercial, the technology has the potential to be used at both new and existing smelters.

Finally, industrial sector emissions are among the fastest growing across the economy. Emissions across the stationary energy, fugitive emissions, transport and industrial processes and product use sectors—which contain the majority of Safeguard facilities—have all grown since 2005 (Figure 2.1). In contrast, emissions from the electricity sector peaked in 2009 and are now around 20 per cent below 2005 levels. Like the Safeguard sectors, the electricity sector is characterised by large facilities and big capital investments, with technology change required to realise emissions reductions. While there are various reasons for the difference between sectors, it shows the importance of the Safeguard Mechanism reforms providing a policy signal to reduce emissions from these industrial sectors, which is aligned with Australia's national targets.

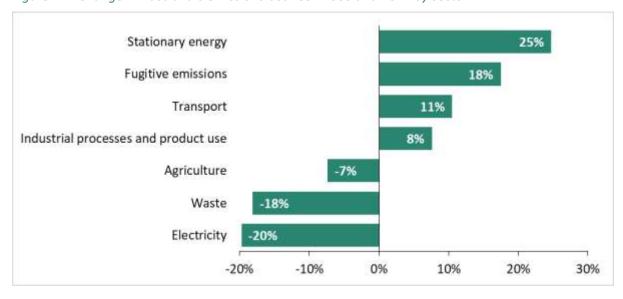


Figure 2.1: Change in Australia's emissions between 2005 and 2022 by sector

Source: Quarterly update of the Australian National Greenhouse Gas Inventory, June 2022

Notes: Data is for year to June 2005 to year to June 2022. Land use, land use change and forestry (LULUCF) — estimated to have declined by 146% over the same period — has been excluded from the chart.

The Government proposes to assign a Safeguard Mechanism target based on its proportional share of national emissions in 2020-21, which was 28 per cent.⁸ This means that facilities covered by the Safeguard Mechanism will be asked to reduce their net emissions at the same pace as the economy as a whole will need to reduce its emissions to meet the national 2030 target.

Some businesses felt that 2020-21 data may not be representative due to the effects of the pandemic. The Government considered this and found that the Safeguard Mechanism's share of national emissions has stayed relatively stable during the pandemic as national emissions have fallen at a corresponding rate. For example, Safeguard Mechanism's share of national emissions in 2018-19—the latest full year of pre-pandemic data—was 27.9 per cent.

Based on the most recent National Greenhouse Gas Inventory data, which is updated every quarter, a 28 per cent share corresponds to 100 Mt of CO_2 -e in 2030. This compares with covered emissions of 137 Mt CO_2 -e in 2020-21 and projected Safeguard emissions of 143 Mt CO_2 -e in 2022-23, the year prior to the start of the reforms. Setting and achieving this 2030 target will ensure that Safeguard emission reductions are on track and aligned with the broad trajectory to reach net zero by 2050 (Figure 2.2)¹⁰.

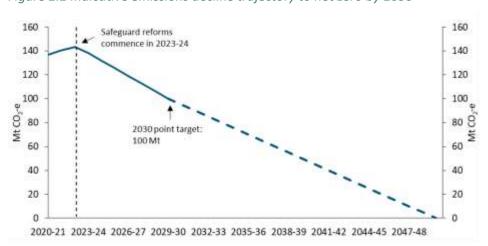


Figure 2.2 Indicative emissions decline trajectory to net zero by 2050

Australia's 2030 target is also implemented as an emissions budget for the period 2021 to 2030. The emissions budget is important. Global warming impacts are linked to cumulative greenhouse gas concentrations, so the total volume of emissions released over the decade better represents Australia's contribution to global warming than emissions in a single year.

⁸ 28.14 per cent before rounding. This does not include grid-connected electricity generation which is subject to a sectoral baseline.

 $^{^9}$ National 2020-21 emissions were 486.57 Mt CO₂-e (June 2022 NGGI Quarterly Update). 2020-21 Safeguard reported emissions were 136.94 Mt CO₂-e. 100 Mt CO₂-e is calculated using a 28.14 per cent share of the national 2030 target of 354 Mt CO₂-e.

¹⁰ From the Safeguard target of 100 Mt in 2030 to net zero in 2050.

Applying the Safeguard Mechanism's proportional share to the national budget gives a Safeguard emissions budget of 1,233 Mt CO₂-e between 2021 and 2030.¹¹ Figure 2.3 presents the Safeguard Mechanism's emissions budget and potential abatement task. From the estimated starting point in 2023-24, the baseline trajectory needed to satisfy both the 1,233 Mt emissions budget and 100 Mt point target will see net emissions fall to around 95 Mt in 2030. The reforms are estimated to deliver total cumulative abatement of 205 million tonnes for existing Safeguard facilities and anticipated new facilities.¹²

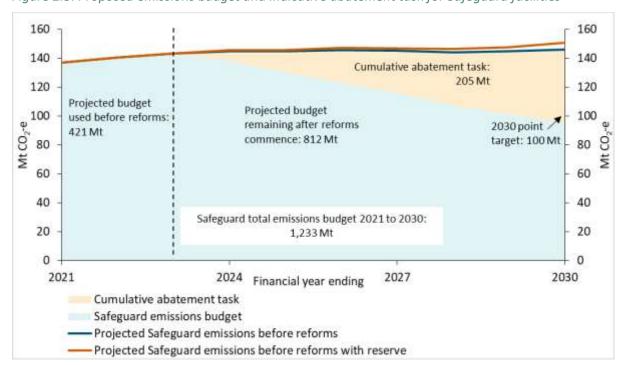


Figure 2.3: Proposed emissions budget and indicative abatement task for Safeguard facilities

The abatement task is estimated relative to projected emissions in the absence of the Safeguard reforms. Without the reforms, emissions from existing and new Safeguard facilities are expected to increase at an annual average rate of 0.7 per cent between 2020-21 and 2029-30¹³. Stronger than expected business-as-usual growth would increase the abatement task. For example, annual average emissions growth of 1.5 per cent would increase the estimated abatement task to 237 Mt.

Aggregate emissions projections for existing Safeguard facilities are consistent with Australia's 2022 national emissions projections¹⁴. Emissions from Safeguard facilities are projected to increase from 2020-21 to 2023-24 due to increased emissions from coal mines and domestic aviation. Emissions from a number of coal mines were low in 2020-21 and 2021-22 due to temporary outages, including

¹¹ The indicative value of the national emissions budget is 4,381 million tonnes CO_2 -e corresponding to the 2030 target. The Safeguard Mechanism's proportional share is 1,233.10 million tonnes CO_2 -e (28.14 per cent of 4,381).

¹² The August 2022 Consultation Paper used a stylised assumption of 0.5 per cent emissions growth per year from existing Safeguard facilities for a cumulative abatement task of 170 million tonnes. The 2022 emissions projections now suggest more material emissions growth from 2020-21 to 2023-24, primarily driven by post-COVID and post-flood recoveries. With new entrants included at unconstrained levels, the projection of emissions from Safeguard facilities grows at an annual average rate of 0.7 per cent per year between 2021 to 2030 and has higher emissions in the early years, contributing to the upwards revision to the cumulative abatement task. Based on Australia's emissions projections 2022 and the projection of emissions from existing facilities only, the cumulative abatement task to existing facilities is 166 Mt for 2021 to 2030.

¹³ DCCEEW analysis for 2022 emissions projections

¹⁴ Available on the Department of Climate Change, Energy, the Environment and Water's website.

from flooding events. Those coal mines are projected to return to normal production levels over 2022-23 and 2023-24. Emissions from domestic aviation reduced as transport activity was impacted by the COVID pandemic. Emissions from domestic aviation are projected to return to historical average levels from 2022-23 onwards.

In the absence of the reforms, emissions from Safeguard facilities are projected to remain relatively stable from 2023-24 to 2029-30 as increased emissions from LNG production are offset by projected declines in emissions from coal mining, manufacturing and other mining sectors. Emissions from LNG production are projected to increase as capacity increases and gas from higher CO₂ fields is used to backfill existing LNG plants. Emissions from coal mines are projected to decline as total production falls and some gassy underground mines are projected to close, while emissions from manufacturing and other mining decline due to fuel switching and energy efficiency.

Without the reforms, aggregate emissions for existing Safeguard facilities are projected to reach a peak of 136 Mt by 2030, and total emissions including for new entrant Safeguard facilities are projected to reach 146 Mt by 2030.

The Safeguard Mechanism's 2030 target would be set at no more than 100 Mt in 2030 and 1,233 Mt between 2021 and 2030, representing a proportional share of the national target and delivering an estimated 205 million tonnes of abatement (relative to current trends) by the end of the decade.

3 Setting baselines to achieve an equitable distribution of costs and benefits

Baseline setting is a key policy element that determines the costs and benefits faced by each facility to meet its Safeguard obligations. The aim is to design policy in a way that shares these impacts equitably. This section considers the following baseline setting issues:

- overarching framework;
- setting baselines for existing facilities; and
- setting baselines for new facilities.

3.1 Overarching framework

The Government consulted on a fixed (absolute) or production-adjusted (intensity) baseline setting framework.

- **Fixed** (absolute) baselines place an absolute limit on covered emissions. They can be met by reducing output and/or improving emissions-intensity.
- **Production-adjusted** (intensity) baselines rise and fall annually with production. They can only be met by improving the emissions-intensity of production.

Consultation revealed widespread support for retaining the production-adjusted framework. It helps to decouple emissions from growth, supporting business competitiveness and growing jobs as the world continues to decarbonise.

Recognising that the quantum of emissions reduction for the Safeguard Mechanism sector will remain constant, AIGN members have indicated a preference for productionadjusted baselines to decouple emissions from economic growth.

Australian Industry Greenhouse Network

As Australia rapidly moves toward becoming a renewable export superpower, WWF-Australia would like to see facilities reduce their emissions intensity of production to net-zero. Therefore, building on the production adjusted (intensity) baseline setting framework would be preferred.

World Wide Fund for Nature-Australia (WWF-Australia)

A production-adjusted framework also helps to protect against carbon leakage as baselines cannot be met through reduced production. Instead, effort is tightly focussed on improving the emissions intensity of production, so there is a reduced risk of businesses moving production offshore.

BHP prefers an intensity approach for reasons that are articulated in the Consultation Paper (i.e., it does not penalise business output, has a lower impact on production costs and consumer prices, and is less likely to incentivise carbon leakage).

BHP

INPEX concurs with the benefits of an intensity-based framework as outlined in the consultation paper, namely ... facilities with EITE activities are not unduly encumbered by an inability to pass on increases in compliance costs that would occur in relation to growth under the absolute framework.

INPEX

Some commentators preferred a fixed approach, because it places an absolute cap on emissions, delivering greater certainty around meeting the target.

Fixed baselines will provide more certainty for meeting the 2030 target, because they cannot fluctuate with production. We note the Government's concerns about constraining growth via fixed baselines if facilities choose to forego increasing production in order to avoid breaching a baseline. Yet, the fundamental objective of the policy is to constrain growth of high-emission activities and support growth of low-emitting activities.

Grattan Institute

The Government acknowledges arguments in favour of fixed baselines. However, aggregate baselines determine the emissions constraint and either framework can be calibrated to meet a given target. The Government prefers an approach that supports economic growth while delivering emissions reductions.

Some feedback favoured retaining the ability for a facility to choose a production-adjusting baseline or a fixed baseline.

Given the range of different facilities covered by the SGM, it is difficult to establish a single approach that treats all facilities equitably. The SGM design should be flexible enough to cater for the characteristics of individual facilities and they should be permitted to elect, based on their specific circumstances, to have either a fixed baseline or a production-adjusted baseline.

Glencore

Allowing optionality would mean businesses with falling output would choose fixed baselines and receive credits for reducing production, while growing businesses would choose production-adjusted baselines which would increase over time. The credits would not be balanced by demand and overall baseline decline rates would need to be higher than under other models. This would shift costs to growing businesses.

The Government proposes to retain the existing production-adjusted (intensity) framework, noting the need to ensure the 2030 target and Safeguard emissions budget can be reliably met. This will be achieved by building a 'reserve' into decline rate calculations. The reserve will have the effect of 'holding back' some of the emissions budget to take account of uncertainty about:

- the volume of baselines for new facilities that come on-line before 2030;
- the possibility that production growth is higher than expected at existing facilities; and
- the level of differential decline rates for emissions-intensive, trade exposed facilities qualify for (see Section 5.2 for more details).

The reserve will apply equally to all Safeguard Mechanism facilities. The level of the reserve and baseline decline rates are discussed in detail in section 6.

The existing production-adjusted (intensity) baseline setting framework would be retained.

A reserve would be built into baseline decline rate calculations to help ensure the 2030 target is met. The reserve would hold account for higher-than-expected production growth at new and existing facilities, and trade exposed baseline adjustments.

3.2 Setting baselines for existing facilities

The Government consulted on two approaches for setting baselines for existing facilities that remove aggregate headroom¹⁵ and allow crediting and trading to commence, noting that hybrid options that remove aggregate headroom would also be considered.

- Option 1: all baselines are set using benchmark (industry average) emissions-intensity
 values—they hold all facilities making the same product to the same standard and make the
 least emissions-intensive producers relatively better off.
- Option 2: all baselines are set using site-specific emissions-intensity values—they approximate actual facility emissions levels—this is often referred to as 'grandfathering'.

¹⁵ Aggregate headroom is the gap between aggregate baselines and aggregate emissions. Removing it delivers scarcity (so aggregate baselines equal aggregate emissions) and ensures that declining baselines will result in genuine emissions reductions.

Consultation revealed widespread support for removing headroom so crediting and trading can commence immediately, but divergent views regarding these two options. Stakeholders acknowledged that each has strengths and weaknesses and an individual facility's preference was strongly influenced by its relative emissions-intensity.

There are strengths and challenges posed by both site-specific and industry-average baselines.

Australian Industry Greenhouse Network

Some facilities and other stakeholders prefer industry-average benchmarks (Option 1), because they encourage production to occur at the least emissions-intensive facilities; recognise prior action to reduce emissions or invest in low emissions resources; and hold all facilities producing the same output to a common, transparent standard.

... Alcoa agrees that setting all baselines to industry-average (benchmark), emission-intensity values encourages lowest emission production, is relatively simple and transparent, and creates an even playing field between existing facilities and new entrants.

ALCOA

Industry average (intensity) benchmarks should also be applied to existing and new facilities, consistent with the default variables published in the current Safeguard Mechanism Rule... This approach would hold all facilities making the same product to the same standard and therefore better incentivise least emissions intensive production.

Origin Energy

BlueScope's preference is for industry-average intensity baselines... It is also efficient in that it incentivises production from facilities that are the least emissions intensive and has the effect of recognising past investments and activity to reduce emissions by facilities that perform better than the average.

BlueScope

... a Facility Baseline will reduce the incentive for abatement from substitution by providing a higher baseline to high emitters and low baseline to low emitters.

Frontier Economics

Others prefer site-specific baselines (Option 2), which recognise individual facility circumstances, such as age, location, technology, fuel availability and geology. This means all facilities would start with enough baseline to cover their emissions, so compliance costs would be more evenly distributed.

Therefore, the application of industry-average benchmarks to those sectors and facilities where emissions intensities are driven by inherent resource characteristics will lead to immediate and unresolvable inequalities in compliance costs, which is contrary to the principle of equitability stated in the consultation paper.

INPEX

BHP does not support average industry benchmarks that would unfairly penalise older facilities and/or those in higher emissions intensity locations, given the inability to relocate assets in the sector. Established operations should not be advantaged or penalised based on their historical circumstances and for decisions made under former policy settings.

BHP

Stakeholders also identified risks with moving directly to industry average benchmarks (Option 1), including significant upfront costs for some high emitters, with little time to prepare and adjust. And potential inefficiencies and inequities with Option 2, including the potential for low emitters to face higher abatement costs because they have exhausted the lowest cost abatement opportunities.

South32 supports Option 2, setting all baselines using facility-specific emission-intensity values. However, it should be taken into consideration that facilities which have implemented the best practicable and available abatement solutions to date will have limited options to further reduce their hard-to-abate emissions given the maturity (or lack thereof) of technology to manage emissions.

South32

In summary, industry-average benchmarks (Option 1) deliver a well-aligned incentive for production to occur at the least emissions-intensive facilities. This helps to deliver Australia's climate targets at lowest cost. However, they introduce potentially significant upfront costs (exceedance) and benefits (credits) for some facilities at relatively short notice.

In contrast, site-specific baselines (Option 2) more evenly distribute costs in the short term, but fail to encourage production to occur where it is least emissions intensive, increasing the overall costs of meeting Australia's climate targets.

To balance these strengths and weaknesses, the Government will implement a hybrid model weighted towards site-specific baselines (Option 2) in the short term, transitioning to industry-average benchmarks (Option 1) by the end of the decade (see Box 3.1).

The hybrid model delivers the medium to long term benefits of a benchmark approach, while giving businesses sufficient time to prepare. It ensures incentives to reduce emissions will be well aligned from 2030, but that short term impacts are introduced in manageable increments.

Box 3.1: Baseline setting under a hybrid approach

A simplified baseline setting formula for production-adjusted baselines using the hybrid approach is as follows (it doesn't take account of some policy elements described below, such as borrowing):

For all relevant production variables (or outputs):

Facility baseline =
$$\sum$$
 Production [(a × El_{IA}) + (b × El_{SS})] × decline factor

Where the:

- **production variable** identifies the product or service being delivered, for example tonnes of alumina or passenger kilometres
- **El**_{IA} **and El**_{SS} are the industry average and site-specific emissions intensity of production, for example, emissions per tonne of alumina or emissions per passenger kilometre
- **a and b** represent the ratio of industry average and site-specific emissions-intensity values (where a + b = 1)
- decline factor reflects the cumulative decline rate (discussed in section 6)

With the following ratio of industry average to site-specific emissions-intensity values:

	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	
Weighting El _{IA} :El _{SS}	10:90	20:80	30:70	40:60	60:40	80:20	100:0	

For example, using this simplified formula, in 2023-24:

Facility baseline = \sum Production [(.1 × El_{IA}) + (.9 × El_{SS})] × decline factor

Whereas, in 2028-29:

Facility baseline = \sum Production [(.8 × El_{IA}) + (.2 × El_{SS})] × decline factor

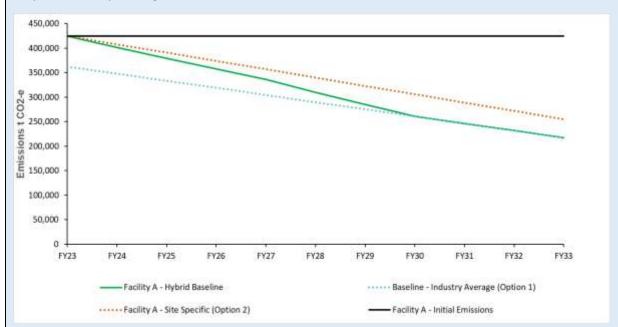
By combining options 1 and 2 in ratios that always sum to 100 per cent, the hybrid model removes aggregate headroom from scheme commencement and delivers the same aggregate baselines as either option 1 or option 2 in every year to 2030. All three models deliver the same amount of abatement to 2030 for any given baseline decline rate. The key difference between the three models is which facilities see costs and benefits.

An illustrative example of the hybrid model is provided in Box 3.2.

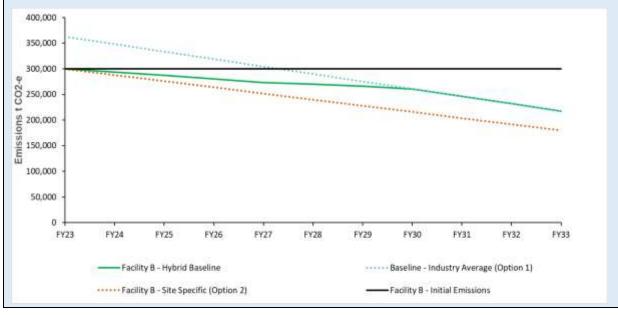
Box 3.2: The hybrid baseline setting model—an illustrative example

Two examples of the hybrid baseline setting model are provided below. They illustrate similar facilities producing a single product, but with different emissions-intensity of production. In these examples, the **industry average emissions intensity is 1.45 tonnes CO₂-e per tonne of output**.

Facility A has a site-specific emissions intensity of 1.7 tonnes CO₂-e per tonne of output—above industry average. At the start of the transition period, the facility receives a baseline which is very close to its actual emissions—90 per cent of its baseline reflects its site-specific emissions intensity value. During the period to 2030, the facility's baseline declines as it transitions from a baseline heavily weighted to its site-specific emissions intensity performance, to a baseline calculated using only the industry-average benchmark in 2030.



Facility B has a site specific emissions intensity of 1.2 tonnes CO₂-e per tonne of output product—below industry average. The initial baseline is also heavily weighted towards its site-specific emissions performance, moving to the industry average benchmark by 2030. Both facilities have the same baseline from 2030 onwards, but facility B has a much flatter baseline trajectory to 2030.



An assessment of the hybrid model against the policy principles is provided in Box 3.3.

Box 3.3 Assessing the hybrid model against the policy principles

Effective

The hybrid model can be calibrated to meet the 2030 target, so can be effective in helping to meet Australia's 2030 and 2050 emissions reduction targets.

Equitable

The hybrid model helps to manage short term impacts, introducing costs (exceedance) and benefit (credits) in manageable increments. This gives businesses time to adjust, prepare for, and deliver the significant emissions reductions required to 2030 and 2050.

Efficient

The hybrid model removes headroom, allowing crediting and trading to commence immediately, which supports a least cost outcome. It also provides a medium to long-term incentive for production to occur where it is least emissions intensive, which further lowers the overall costs of meeting Australia's climate targets.

Simple

The hybrid model is more complex than industry average benchmarks, which are already published. Using site-specific values (either for option 2 or a hybrid) means additional emissions-intensity values will be needed for facilities currently using published industry average values. The Government believes this is a necessary trade-off to deliver a fair outcome in the short term.

The Government acknowledges that the hybrid approach increases complexity compared with a simple industry-average approach. In particular, new site-specific emissions-intensity values will be needed for facilities that are currently using published industry-average values. Implementation details are discussed in more detail below.

Baselines for existing facilities would be set using a hybrid model initially weighted towards the use of site-specific emissions intensity values, and transitioning to industry average emissions intensity values by 2030.

3.3 Implementing a hybrid model

Transitioning from existing arrangements

The hybrid approach adds complexity by combining site-specific and industry-average emissionsintensity values, but also presents an opportunity to make baseline setting arrangements simpler overall. In particular, the optionality that currently exists will be removed, so that all Safeguard facilities are treated consistently. From the commencement of Safeguard Mechanism reforms:

- All facilities must use production-adjusted baselines: Reported and calculated baselines will no
 longer be available—this includes the previous opportunity to apply for a new calculated
 baseline due to the inherent emission variability of a natural resource (see details below).
 - By 2023-24, most facilities will already have moved to production-adjusted baselines. A small number (less than 20) will be in their final year of a calculated baseline—the new approach will bring forward this transition by 12 months.

- All facilities must use Government-defined production variables: The hybrid model uses industry-average emissions-intensity values. These values can only be calculated for Government-defined production variables¹⁶, so all facilities must use them.
- All production variables will be production-adjusted: the petroleum refining production variable will move from the fixed to production-adjusted framework (see details below).

Inherent emissions variability

The Safeguard Mechanism was originally designed to set baselines to keep pace with business-as-usual emissions. To achieve this, mining, oil and gas facilities could reset their site-specific emissions-intensity value once before 1 July 2025 using an 'inherent emissions variability' calculated baseline application.

The objective of the Safeguard Mechanism has changed and some businesses acknowledged that retaining the natural resource variability criteria would not be consistent with a net zero trajectory.

The inherent emissions variability criteria have been an important means by which Safeguard facilities are able to seek baseline adjustments for the uncontrollable effects of variable natural resource properties on their business-as-usual emissions. We acknowledge that the ongoing relevance of the criteria in the context of declining baselines is open to debate and suggest this be determined during Phase 1.

BHP

INPEX concedes that re-assessment of emissions intensities through the Inherent Emissions Variability clause is no longer aligned with net zero ambitions however the scenarios in which facilities would seek to employ this clause still exist.

INPEX

For this reason, the Government proposes to remove the 'inherent emissions variability' criteria. Instead, all baselines will use a site-specific emissions intensity value that reflects historic data using a consistent calculation method—meaning all facilities will be treated equally.

Petroleum refining

In cases where output-based production variables are not feasible, an input or intermediate product is used as a proxy. Under current arrangements, these non-output based production variables result in fixed baselines and are published in a separate schedule (Schedule 3) of the Safeguard Mechanism Rule. Petroleum refining is the only production variable in this category.

The Government proposes to move the petroleum refining production variable to the productionadjusted framework (Schedule 2). This will simplify the Safeguard Mechanism Rule, including by removing the need for the baseline setting framework to accommodate fixed baselines.

The Government recognises that allowing an input-based production variable to annually adjust carries the risk that a facility may consume more inputs to increase its baseline. However, the Government believes these risks are manageable in this specific case, noting that only two facilities use this production variable and there are commercial incentives to use input materials efficiently.

¹⁶ Government-defined production variables are published in Schedule 2 of the Safeguard Mechanism Rule.

From the commencement of Safeguard Mechanism reforms in 2023-24:

- all facilities to be on production-adjusted baselines—reported, calculated and fixed baselines will no longer be available;
- all facilities to use published, Government-determined production variables.

Reviewing production variables

To ensure baselines can be calculated for all facilities, the Department will work with businesses to ensure appropriate production variable definitions and emissions-intensity values are published in the Safeguard Rule¹⁷. Most are already published but a small number are still being finalised, and some may need to be revisited to ensure they are suitable in the context of crediting and declining baselines. This will include:

- **finalising emissions-intensity values**: calculating the remaining industry average emissions intensity values for existing production variables, including reservoir CO₂;
- **finalising production variables**: defining outstanding production variables (such as lithium hydroxide and mine-site rehabilitation); and
- **reviewing existing production variables**: existing production variable definitions will be reviewed to ensure they remain applicable to the range of industry participants.

The review of production variables will be designed to ensure they are suitable for driving least-cost abatement. To do this, they should be output-based and broad enough to cover all relevant technologies, physical and chemical processes. The Department will review all production variable definitions, with a focus on those that are not output-based—such as coal mine waste gas and reservoir CO₂—to ensure there is a comprehensive set of suitable production variables when reforms commence.

In consultation with Safeguard businesses, the Government would:

- finalise and publish remaining production variables and industry average emissions intensity values; and
- review existing production variable definitions to ensure a comprehensive set of suitable production variables is in place when reforms commence.

Who will receive a new site-specific emissions-intensity value?

To implement the hybrid model each facility will need both a site-specific and industry-average emissions intensity value for all relevant production variables. This means new site-specific values will be needed for facilities that currently use published industry-average values.

Businesses highlighted the potential benefits of resetting all site specific emissions intensity values on a consistent basis, including facilities that already have them as part of a calculated baseline application.

¹⁷ Schedule 2 of the Safeguard Mechanism Rule lists prescribed production variables and associated emissions intensity values.

BHP recommends that baselines be updated using actual facility-specific emission intensities. The Consultation Paper observes that this approach would not compromise the achievement of Australia's emission reduction targets.

BHP

The Government proposes to reset all site-specific emissions intensity values. This will ensure they are all set on a consistent basis, using actual facility data, instead of some being based on forecasts used for calculated baseline applications.

All existing facilities' site-specific emissions-intensity values would be reset using historic data.

How will new site-specific emissions-intensity values be calculated?

All facilities must submit an application for site-specific emissions intensity values, as they currently do for calculated baseline applications. When calculating these values, emissions must be apportioned between outputs in a way that is consistent with published production variable definitions¹⁸. Applications must be accompanied by an audit report. This application will only be required once—to facilitate the hybrid baseline setting model. Applications will be due by 30 April 2024.

The following method will be used to calculate new site-specific emissions intensity values:

- **Step 1**: determine the emissions intensities for each of the previous 4 years (2018-19 to 2021-22).
- **Step 2**: exclude the highest and lowest emissions intensity years to address any significant anomalies, including potential impacts from the pandemic.
- **Step 3**: calculate a production-weighted, average emissions-intensity for the facility using the remaining two years.

If a facility has:

- only two or three years of data in the calculation period, the highest value will be excluded;
- one year of data in the calculation period, that year will be used.

If a facility has more than one production variable, emissions will be apportioned between different outputs. The method for apportioning emissions will be consistent with the production variable definitions published in the Safeguard Mechanism Rule (Schedule 2) and associated industry-average emissions intensity values. Published industry-average emissions intensity values will not be updated as part of this process.

The site-specific and industry-average emissions intensities will then be used to calculate the facility baseline—according to the ratios in section 3.2—following the compliance period, once production data becomes available. This is consistent with the existing timing for determining current production adjusted baselines.

¹⁸ Production variable definitions are described in detail in the Safeguard Mechanism document.

Facilities would need to apply for site-specific emissions-intensity values by 30 April 2024, with the application accompanied by an audit.

The values would be calculated using the middle two values from the four most recent years of data (2018-19 to 2021-22).

The remaining two years of data would 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.

3.4 Setting baselines for new facilities

Under current arrangements, baselines for new facilities—those that are first covered under the Safeguard Mechanism after 1 July 2021—are intended to be set using emissions-intensity benchmarks, though the level of these benchmarks has not been set¹⁹. Consultation considered two options for setting new facility benchmarks: best practice or industry average emissions intensity values.

Many businesses supported setting new entrant baselines at industry average.

BlueScope considers that new entrants should be subject to the same baseline-setting requirements as existing facilities, i.e. on an industry-average emissions intensity basis.

BlueScope

Other business and community groups advocated for best practice baselines.

... generous treatment of new facilities means substantially harsher baselines and decline rates for existing facilities ... We propose that new facilities be subject to global best practice benchmarks for new facilities. This should be significantly tighter in most cases than a purely Australian focus. Any new facility benchmark should be technology-neutral, applying to any process on the basis of its ultimate product. It should also avoid distinctions on the basis of location or geology.

Ai Group

Baselines determine the relative share of costs among facilities—less stringent baselines for new facilities means more stringent baselines for existing facilities. While applying industry average benchmarks to new investments would avoid potential differences between 'greenfield' and 'brownfield' developments, it would risk locking-in long lived assets that are as emissions-intensive as existing production and could operate for decades. This would be inconsistent with a net zero pathway.

 $^{^{19}}$ Under current arrangements, a new entrant is defined as a facility that first triggers the Safeguard Mechanism threshold of 100,000 tonnes CO₂-e after 1 July 2021 and was not required to report its emissions under NGERS for any 5 or more years before the year it became covered by the Safeguard.

New investments differ from existing production in that they have the opportunity to use the latest technology and build world's best practice emissions performance into their design. The Government expects new facilities to take advantage of these technologies and practices and therefore proposes to set baselines for new facilities at **international best practice**, **adapted for an Australian context**. This sends a strong signal to investors that Australia is on a pathway to net zero and new production must support this goal. Adapting international best practice for an Australian context means, for example, adjusting for energy sources, the types of metal ores that are processed in Australia compared to overseas, or other resources that are used overseas but are not available in Australia. It will take into account the effect of technologies implemented in Australia and overseas, including renewable energy, low emissions technologies and electrification. The Government will begin developing a framework for determining international best practice, which will be developed in consultation with stakeholders. The process will include assessing available information and identifying comparable international producers.

To reduce competitive distortions between new and existing facilities, international best practice will also apply at existing Safeguard Mechanism facilities if they begin producing new products. This means any Safeguard facility—whether new or existing—that invests in new plant and equipment resulting in the use of a new production variable will face the more stringent performance requirement. New entrant baselines will not apply to facilities that trigger the coverage threshold after 1 July 2023, but have been operating and reporting under NGERS for some time (unless they start producing a different product).

The Government would apply new entrant baselines from 1 July 2023, consistent with commencement of other Safeguard Mechanism reforms. Any facilities that become covered by the Safeguard Mechanism in the current compliance year (2022-23) will have a baseline set using the published industry average emissions intensity values set in Schedule 2 of the Safeguard Rule.

New facility baselines would be subject to an annual decline rate, consistent with baselines for existing facilities.

New facility baselines would be based on international best practice emissions-intensity benchmarks, adapted for Australian circumstances.

International best practice would also apply at existing Safeguard Mechanism facilities if they begin producing new products.

New entrant arrangements would commence from 1 July 2023, consistent with broader Safeguard reforms.

New facility baselines would be subject to an annual decline rate, consistent with baselines for existing facilities.

4 Flexible compliance options to lower costs

4.1 Crediting and trading

The Safeguard Mechanism already includes flexible compliance options to help businesses meet their compliance obligations, including the ability to surrender carbon offsets—in the form of Australian Carbon Credit Units (ACCUs)—as an alternative to reducing their on-site emissions.

Removing 'headroom' and declining baselines will unlock an additional source of flexibility by allowing facilities to generate tradable credits where their emissions are below their baseline. This

means facilities with relatively low cost abatement can sell credits to facilities whose abatement options are more costly or limited, without jeopardising the climate goal.

Crediting and trading doesn't change the environmental outcome or the amount of abatement delivered by the Safeguard Mechanism. It simply lowers the cost of reducing emissions—for any given climate goal—because the reductions occur where they are cheapest.

There was widespread support among Safeguard facilities for access to crediting and trading—it will help businesses to manage compliance costs as baselines decline.

Crediting and trading should commence from the start of the scheme. The administrative allocation of SMCs is very important as this encourages facilities that can reduce emissions by investing in abatement to do so, which is critical to achieving the 2030 target.

Minerals Council of Australia

Crediting and trading of Safeguard Mechanism Credits (SMCs) will allow abatement to occur where it is cheapest.

Australian Industry Greenhouse Network

A small number of commentators have incorrectly characterised SMCs as 'offsets', and argue that they should be 'additional'. Others recognised that SMCs are generated under a regulated emissions limit, so they are not offsets and claims that they should be additional are erroneous (see Box 4.1):

Provided Safeguard Mechanism baselines are complied with and the scheme's overall emissions reductions objectives are being met, the absence of additionality requirements for SMCs is not a concern for their use within the Safeguard Mechanism scheme.

Climate Change Authority

Provided that the baseline headroom is removed and they decline in line with the national target, Safeguard Mechanism Credits (SMC) will be high integrity. In this scenario, SMCs should be issued and used by facilities to meet SGM obligations without limit, along with being traded with other facilities to meet their obligations.

Australian Centre for Corporate Responsibility

The Clean Energy Regulator will automatically issue Safeguard Mechanism Credits (SMCs) to facilities with emissions below their Safeguard Mechanism baseline²⁰. Those credits can be sold to other Safeguard Mechanism facilities, surrendered to meet compliance obligations or banked for future use (see section 4.5). This is a relatively simple approach to crediting that avoids the administrative costs of project-based offsets (see Box 4.1). Further, the Government does not need to identify which facilities have access to the low cost abatement opportunities as this will be left to the market.

²⁰ That is, their Safeguard Mechanism compliance baseline. A separate baseline would not be needed for crediting purposes.

Box 4.1: Nature of crediting

Under the reformed Safeguard Mechanism, Safeguard Mechanism Credits (SMCs) will not be carbon "offsets", because they are generated within a regulated emissions limit. The integrity of SMCs arises from the regulated emissions limit, which constrains the overall emissions of Safeguard participants. Aggregate baselines form the limit—they can be calibrated to meet the desired contribution to the 2030 target.

This means that, unlike ACCUs—which are offsets—SMCs will not need to be 'additional' as defined under the *Carbon Credits (Carbon Farming Initiative) Act*.

The presence of the limit ensures that, in aggregate, Safeguard entities stay within their overall emissions budget. If one facility emits less than their baseline, they can sell a credit to another facility that emits more than its baseline. It is not necessary to know how or why a facility has reduced their emissions, or what its hypothetical business-as-usual emissions would have been.

This is a key benefit of the Safeguard Mechanism compared with an offsets scheme. It has lower administrative costs and risks—because there is no need to assess the 'additionality' of abatement at the project level.

Legislation to give effect to crediting and trading will be required. Exposure draft Act changes were released for consultation in October 2022²¹ and the *Safeguard Mechanism (Crediting) Amendment Bill 2022* has been introduced to Parliament. Crediting and trading will commence on 1 July 2023, subject to passage of these legislative amendments.

Crediting and trading would commence on 1 July 2023, after passage of the *Safeguard Mechanism* (*Crediting*) *Amendment Bill 2022*.

4.2 Implementation

Who can generate credits

SMCs will be automatically generated when emissions are below baselines. They will be available to all Safeguard Mechanism facilities, except under the following circumstances:

- **Borrowing**: a facility cannot earn credits in any year when its baseline has been increased due to borrowing arrangements (section 4.5).
- **Multi-year monitoring periods**: facilities on multi-year monitoring periods cannot earn credits (section 4.6).
- Landfills: landfills operate under unique circumstances, and only some portion of their emissions are covered by the Safeguard Mechanism (section 7).

The Government proposes to allow facilities to continue to receive SMCs for five years after they fall below the coverage threshold of 100,000 tonnes CO_2 -e. This will retain the incentive for facilities to reduce their emissions when they are operating close to the threshold. Facilities would need to continue to report relevant information through the National Greenhouse and Energy Reporting Scheme (NGERS) to enable them to be credited.

²¹ https://consult.dcceew.gov.au/safeguard-mechanism-reform-consultation

All Safeguard Mechanism facilities with emissions below their baseline would be able to generate credits, except landfills and facilities accessing multi-year monitoring periods, borrowing arrangements and deemed surrender provisions.

Facilities that fall below the coverage threshold would continue to be eligible to receive credits for five years, noting that their baseline will continue to decline.

4.3 Domestic offsets

Under current arrangements, Safeguard facilities can surrender domestic offsets (Australian Carbon Credit Units (ACCUs)) as an alternative to reducing their on-site emissions. Access to ACCUs will continue unchanged. It allows businesses to access the lowest cost abatement outside the scheme—for example, in agriculture and land management.

Safeguard Mechanism facilities would be able to continue surrendering domestic offsets—in the form of ACCUs—to meet their compliance obligations

Interaction with Emissions Reduction Fund

The consultation paper proposed that Safeguard facilities should no longer be able to generate ACCUs for projects that reduce covered emissions. Some businesses supported this approach:

bp agrees it is important for the credibility of the safeguard mechanism and ACCUs that there is no double counting of emissions reductions. As proposed, a simple way to achieve this is to no longer allow for safeguard facilities to generate ACCUs for emissions covered by the baseline.

bp

Others argued that existing double-counting provisions would prevent abatement from being counted twice.

INPEX considers prevailing double-counting provisions would typically ensure that SMCs are not issued for the same abatement that is achieved from the ERF projects generating ACCUs, and that if double-counting scenarios were discovered to remain that these could be addressed through the amendment of the exiting provisions.

INPEX

While double counting provisions can prevent both ACCUs and SMCs being issued for the same reduction in emissions, it doesn't make sense to allow projects that reduce regulated emissions to generate offsets. For all other project proponents, ACCU projects are subject to strict additionality requirements. This includes a requirement that the reduction should not be required by law.

To avoid double counting and additionality concerns—and preserve the integrity of the Safeguard Mechanism—ACCUs will not be able to be generated for reducing covered emissions at Safeguard facilities once baselines begin to decline. Transitional arrangements will be put in place for Safeguard facilities that already have registered projects or have contracts to supply ACCUs to the Government.

New ERF projects

Safeguard facilities, and other project proponents, will no longer be able to register ERF projects that reduce covered emissions at Safeguard facilities. Instead, facilities that beat their baseline can

generate SMCs—which can be sold to other Safeguard facilities, retaining the incentive for facilities to reduce their emissions.

They can still register land sector projects and projects that reduce electricity use (scope 2 emissions) and generate ACCUs from these activities.

Existing ERF projects

Projects that are already registered can continue to generate and sell credits for their existing crediting period. However, they will not be able to enter into new contracts for the Government purchase of ACCUs, or extend their crediting periods.

Existing double counting provisions will be retained, so any ACCUs generated from existing projects will be added back onto the facility's net emissions number²². This will prevent double counting of ACCUs and prevent Safeguard facilities with registered ACCU projects from generating both ACCUs and SMCs.

Existing ERF Government purchase contracts

Existing contracts will remain in place, and 'deemed surrender'²³ provisions will be grandfathered for two years from commencement of the reforms. This means facilities with existing contracts can continue to sell the ACCUs to the Government for the contract duration, but can only count the associated abatement towards their baseline for the first two years.

ERF projects that reduce covered emissions at Safeguard facilities will no longer be able to be registered.

Projects that are already registered would continue to generate and sell credits for their existing crediting period, but would not be able to enter into new contracts for Government purchase of ACCUs or extend their crediting period.

Existing government-purchase contracts would remain in place, with 'deemed surrender' provisions grandfathered for two years from scheme commencement, then removed.

4.4 International offsets

Many safeguard facilities strongly support access to international units for compliance under the Safeguard Mechanism. They see international offsets as another opportunity for lowering the costs to Australian businesses of meeting Australia's climate targets.

Provided international offsets are credible and the surrender can be accounted towards Australia's emissions reduction efforts, there should be no arbitrary constraints placed on the use of international offsets.

Australian Industry Greenhouse Network

The Government recognises these concerns, but notes that the primary purpose of the *Powering Australia* policy is to transform the domestic economy, delivering jobs and enhancing Australia's international competitiveness as the world moves to net zero. In addition, the market for

²² Double counting provisions mean that, in any year that a Safeguard facility creates ACCUs from an ERF project, the volume of ACCUs will be added onto the facility's net emissions number.

²³ The 'deemed surrender' provisions mean that ACCUs delivered to the government under contract are also treated as being surrendered to reduce the emissions of the facility.

international offsets and details of the rules and accounting issues for cross-border transfers are still being developed.

International offsets are not proposed to be part of the initial reforms, but the Government may consider including them in the future, so long as they are of high integrity and can contribute to Australia's Paris commitments. Limits on their use may be appropriate, to protect the transformation of our domestic economy. In 2023 the Government will consult on amending legislation to allow for high integrity international units to be included in the Australian National Registry of Emissions Units and provide a mechanism for such units used for compliance at a future time.

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 and will consult in 2023 on the possibility of establishing the legislative framework for international units.

4.5 Banking and borrowing

The consultation paper sought feedback on measures that provide flexibility regarding the timing of when emissions reductions take place. These include:

- **banking**: where SMCs created in the current year can be used for compliance in future years; and
- **borrowing**: where a facility's baseline is increased in a particular year, but decreases by a corresponding amount the following year.

Banking

Banking of SMCs would promote price stability. Prices would reflect not only present supply and demand, but also expectations about future supply and demand, smoothing the overall price path. SMCs could be used when they are most needed, reducing the overall costs for businesses.

The consultation paper proposed to implement Safeguard Mechanism reforms in 2 phases—with transitional arrangements in phase 1 (2023-24 to 2024-25) and banking within, but not between, phases. Restricting banking between phases was intended to manage the risk that some aggregate headroom may remain in the initial years of the reformed Safeguard Mechanism.

A disadvantage of restricting banking between phases is that SMC prices could become unstable at the end of a phase, and could become very low if enough SMCs are available to meet compliance needs. Uncertainty about SMC prices could increase the risks and financing costs associated with investing in emissions reduction projects at Safeguard facilities.

Many businesses supported unlimited banking between phases.

We are supportive of permitting banking and borrowing of SMCs to allow facilities to efficiently manage their emissions liability and any associated costs for customers. Unlimited banking of credits within the proposed phases is appropriate. Consideration should also be given to allowing some proportion of SMCs to be transferred between phases (and potentially post 2030) where this would not compromise the achievement of the 2030 emissions reduction target.

Woodside

Phases are unlikely to be needed under the policy settings proposed in this paper, which include a baseline setting model that removes aggregate headroom and declines baselines from 2023-24. As a result, the Government will not proceed with implementing Safeguard reforms in phases, and will allow unlimited banking of SMCs to 2030. The 2026-27 review will consider whether SMCs can be banked for use after 2030.

Some submissions argued that there should be a time limit on banking of SMCs (based on their vintage) to deter opportunistic banking behaviour.

A rolling time limit on the compliance use of SMC vintages would be better than a system of phases; the latter would provide sharp reductions in the value of abatement activity as the end-of-phase approaches, and no guardrail at all once an indefinite phase is reached. The time limit on use of vintages should be aligned with the rolling five year time window suggested above for other tweaks to scheme settings to take effect.

Ai Group

A fixed time limit on banking of credits could encourage liquidity and help manage any risk of the supply of credits being constrained. However, it would increase carbon market complexity as ACCUs do not have time limits and different SMC vintages would likely trade at different prices. As such, the Government proposes to allow unlimited banking of SMCs to 2030, with arrangements reviewed in 2026-27.

Borrowing arrangements

Borrowing could be implemented by allowing a Safeguard facility to increase their baseline in a particular year, but decrease it in the following year. The consultation paper suggested that borrowing could be limited—for example, to 5 per cent of their baseline—and borrowing beyond 2030 would not be allowed.

Some businesses felt the 5 per cent limit was too low.

We note the concerns raised in the Consultation Paper regarding the risk to emission target achievement posed by unlimited borrowing. However, we believe the suggested 5% upper limit may be too conservative – particularly for those sectors that will largely be reliant on 'step-change' technologies to reduce their emissions.

BHP

Noting the benefits of inter-temporal flexibility, particularly given short lead times for businesses to plan and implement projects by 1 July 2023, the Government proposes to increase the borrowing allowance to 10 per cent. A 10 per cent 'interest rate' will be applied to ensure borrowing is only used when there is a genuine need, rather than to delay abatement. This interest rate will be reviewed in 2026-27.

An alternative to a true-up year is an 'interest rate', requiring additional emissions reductions to be paid back along with the amount borrowed. This would recognise that immediate emissions reductions have greater social value than future ones.

Grattan Institute

A facility could only borrow for a single year at a time and the borrowed amount must be trued-up the following year. An illustrative example is provided in Box 4.2.

Box 4.2: Borrowing—an illustrative example

Borrowing in a single year

Suppose a facility has an initial exceedance of 20 thousand tonnes in 2023-24, but plans to undertake a project in 2024-25 which will deliver ongoing emissions reductions of 40 thousand tonnes a year.

The facility can borrow up to 10 per cent of its initial baseline. In this case, it could borrow up to 30 thousand tonnes in 2023-24, but only wants to borrow 20 thousand tonnes to help avoid exceedance in 2023-24. It has no incentive to borrow more as it cannot receive credits while borrowing and will be charged interest.

In the simplest case—with a baseline decline of 4.9 per cent each year and production remaining constant—borrowing will increase the facility's baseline by 20 thousand tonnes in 2023-24, with the liability paid back in full in 2024-25 plus 2 thousand tonnes interest (10 per cent interest).

'000s	Emissions	Initial	Borrowing	Interest	Adjusted	Compliance
		baseline			baseline	obligation
2023-24	320.0	300.0	20.0	2.0	300.0 + <mark>20.0</mark> =	0
					320.0	
2024-25	280.0	285.3	0.0	0.0	285.3 - (20.0 +	16.7
					2.0) = 263.3	
Total	600.0	585.3	20.0	2.0	583.3	16.7

Borrowing in subsequent years

Suppose the emissions reduction project is delayed. It commences half way through 2024-25 and only delivers 20 thousand tonnes of abatement in 2024-25. The 2024-25 baseline will be adjusted to account for the previous year's borrowing, including interest, but the facility will face an exceedance of 37 thousand tonnes (300 - 263 = 37). However, the facility can borrow up to 10 percent of its initial baseline again. In this case, the facility borrows 28.5 thousand tonnes, reducing the exceedance to 8.2 thousand tonnes.

In 2025-26, the amount borrowed in the previous year plus 2.9 thousand tonnes of interest will be subtracted from the adjusted baseline. The facility borrows 20.8 thousand tonnes to help avoid exceedance in 2025-26.

In 2026-27, the amount borrowed in the previous year plus 2.1 thousand tonnes of interest will again be subtracted from the adjusted baseline. The facility is credited with 13 thousand SMCs as its emissions are now under its adjusted baseline. Over the four years, the facility's adjusted baselines and compliance obligations are equal to its total emissions.

'000s	Emissions	Initial	Borrowing	Interest	Adjusted baseline	Compliance
		baseline				obligation
2023-24	320.0	300.0	20.0	2.0	300.0 + 20.0 =	0.0
					320.0	
2024-25	300.0	285.3	28.5	2.9	285.3 – (20 + 2) +	8.2
					28.5 = 291.8	
2025-26	260.0	270.6	20.8	2.1	270.6 – (<mark>28.5</mark> +	0.0
					2.9) + 20.8 = 260.0	
2026-27	220.0	255.9	0.0	0.0	255.9 – (20.8 +	-13.0
					2.1) = 233.0	
Total	1,100.0	1,111.8	69.3	6.9	1,104.9	-4.9

Borrowing arrangements are intended to help facilities manage their compliance obligations when doing so might otherwise be costly or difficult. To prevent the use of borrowing arrangements for market speculation, it is proposed that SMCs cannot be generated while a facility is accessing borrowing arrangements. In addition, borrowing cannot be used by facilities on a MYMP.

The Government notes there are risks to the 2030 target if borrowing is allowed in 2029-30. The Government will consider this in the 2026-27 Safeguard Mechanism review.

Unlimited banking of SMCs would be allowed to 2030. In other words, SMCs could be used for Safeguard compliance in any year to 2030, irrespective of when they are issued.

Borrowing of up to 10 per cent of the baseline each year would be allowed to 2030, with a 10 per cent interest rate applied in the year after borrowing occurs.

The 2026-27 Safeguard Mechanism review will consider post-2030 arrangements for banking and borrowing.

4.6 Taking account of emerging technologies

A central theme across industry submissions was that many Safeguard facilities consider there are limited abatement technologies currently available to them. Many expect prospective abatement opportunities will come forward in coming years, but are not available in the short term.

The consultation paper acknowledged this issue and suggested that a feature of the existing Safeguard Mechanism—the multi-year monitoring period (MYMP)—be adapted to provide facilities with an extended five year period to develop and implement longer term emissions reduction projects. MYMPs 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 paper considered that access to these extended MYMPs would be based on an assessment of emerging technologies for each facility.

Industry submissions generally supported the concept, though some noted that five years might not be long enough to implement less developed technologies.

The Council believes that a longer multi-year monitoring period (MYMP) such as 5 years for alumina refineries and longer than 5 years for aluminium smelters will be appropriate to account for short term variations in processes and technological solutions. It needs to match the timescale for major capital investments and contractual arrangements.

Australian Aluminium Council

Extended multi-year monitoring periods may be a useful for allowing facilities with limited near term abatement opportunities to manage their own abatement path. This approach would deliver the same emissions result at the end of the multi-year period, but provide flexibility within that period. Being able to benefit from this depends on technology availability within the period.

Minerals Council of Australia

Idemitsu Australia supports flexibility mechanisms that allow facilities to manage their abatement path ways at least cost. Allowing extended multi-year monitoring periods will assist certain facilities to better align baseline declines with the adoption of new technologies that reduce emissions.

Idemitsu Australia

Other submissions argued that MYMPs should not be extended as this would allow facilities to delay abatement actions. Some also highlighted potential risks to the 2030 target if facilities are allowed to extend an MYMP over 2030, and that MYMPs might reduce demand for ACCUs.

With these flexibility features of the incoming framework – crediting and trading, and banking and borrowing – the CEC considers that multi-year monitoring periods become unnecessary, and can be phased out.

Clean Energy Council

While CMI recognises that many industrial facilities do not yet have technology that will allow them to structurally decarbonise, there are no limits on offsetting proposed for the scheme as yet – therefore it would be inappropriate to extend the multi-year monitoring period provision to facilities.

Carbon Market Institute

In responding to submissions, we consider that the five year MYMP would be a useful approach to recognise the available and emerging technologies in each sector without compromising the abatement outcome. However, we consider that eligibility for the MYMP should focus on facilities that do not have reasonably available technological options to avoid the initial exceedance and reasonably anticipate that the facility will be able to reduce its emissions within this period so its average emissions are below the average baseline over the extended period (see figure 4.1).

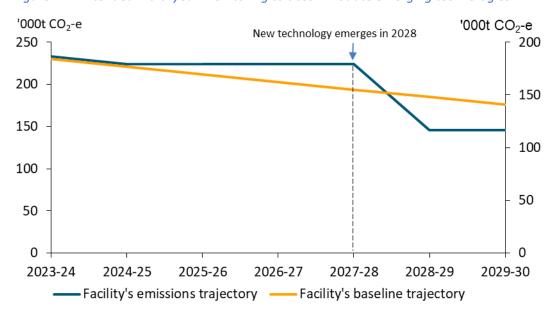


Figure 4.1: Extended multi-year monitoring to accommodate emerging technologies

There would be a risk in allowing MYMPs to straddle 2030 in terms of achieving Australia's 2030 target. It is proposed that MYMPs could not extend beyond 2029-30, but this will be reviewed in 2026-27—the first starting year for which a five year MYMP would go past 2029-30. In addition, facilities on an MYMP will not have access to borrowing.

Application process

The application process for an MYMP could be initiated when a facility exceeds its baseline in the first year of the proposed MYMP period. The application must include a declaration—signed by the responsible financial officer—stating that technology was not available to allow the facility to avoid the exceedance in that first year, but that technology has either subsequently become available or will become available such that the facility can avoid a cumulative liability at the end of the relevant period. This means that a facility not only needs to be below its baseline in the final year, but that it needs to have been sufficiently below its baseline in one or more years such that these below baseline years more than offset the years that the facility is over its baseline.

Facilities must demonstrate to the Clean Energy Regulator that they have a plan in place and a credible basis for providing a declaration that the facility is not expected to be in exceedance at the end of the period. It is intended that SMCs would not be provided at the end of the period. However, the facility may choose to reduce the period of the MYMP once the facility has offset the initial exceedance.

Five year multi-year monitoring periods (up to 2030) would be available where a facility has exceeded its baseline due to a lack of available technology, but has a firm and credible plan in place to reduce cumulative emissions before the end of the five year period.

4.7 Cost containment measure

Consultation revealed widespread concerns about price risks, including due to potential ACCU market supply constraints. Many want access to international units or a cost containment measure to help manage these risks.

The government must include an additional pathway, similar to the Renewable Energy Target (RET) shortfall charge or price cap in other international schemes, for facilities to satisfy compliance obligations and manage upside price and scheme risks by paying per tonne of CO_2 -e. This is in addition to safeguard mechanism credits, the existing official carbon credit systems (Australian Carbon Credit Units), and international credits.

Minerals Council of Australia

The Government proposes to implement a cost containment measure to prevent excessive prices. We note the existing Safeguard Mechanism has a range of enforcement measures, including a penalty for non-compliance (discussed in section 7). However, Safeguard facilities made it clear in previous consultations that a penalty for non-compliance cannot function as a cost containment measure, because their reputation as good corporate citizens is paramount and they will always meet their legal obligations. In addition, the Government does not expect to collect any penalty revenue from these Safeguard changes. Instead, the cost containment measure will be implemented through the Government sale of ACCUs to Safeguard facilities at a fixed price when they need them for compliance. ACCUs can only be purchased by liable entities and will be automatically surrendered for Safeguard Mechanism compliance against a current or prior year. ACCUs sold by the Government cannot be held and used in future years. ACCUs that have been delivered to the Government in the past would not be sold. The Government would only use ACCUs delivered under contract following the necessary legislative changes.

The Government proposes a price of \$75 per tonne CO_2 -e in 2023-24, increasing with the CPI plus 2 per cent each year. This will prevent excessive price volatility and upside price risk without

impeding the development of the offset and SMC market. Any funds received would be used to support additional abatement and decarbonisation to meet Australia's targets.

The Government will review cost containment arrangements in 2026-27.

A cost containment measure would make Government-held ACCUs available at \$75 per tonne of CO_2 -e in 2023-24, increasing with the CPI plus 2 per cent each year.

4.8 Compliance dates

Some changes to compliance dates are needed to implement Safeguard Mechanism reforms. These changes are summarised in the below table and figure. The proposed compliance timing allows SMCs to be issued after emissions are verified, with sufficient time for facilities to trade them before the compliance surrender deadline.

Table 4.1: Key compliance dates

Timing Item	Current Date	New Date	Notes
Application for site-specific emissions intensity values		30 April 2024	New item
NGERS reporting (emissions and production)	31 October	31 October	NGERS reporting deadline unchanged
EITE status application due		31 October	New Item
MYMP applications due	1 February	15 November	Brought forward 2.5 months
Position statement and final SMCs issued, MYMPs assigned		31 January*	New item
Borrowing application		28 February	New item
ACCU & SMC surrender deadline	28 February	31 March	1 month extension
CER compliance publication	1 March*	1 April*	1 month extension

^{*} Or as soon as practical after this date.

Figure 4.1: Key compliance dates



Key changes include:

- **MYMP application**: the deadline has been brought forward, as facilities on an MYMP cannot generate SMCs (see section 4.6).
 - This means Safeguard Mechanism facilities must submit an MYMP application two weeks after they report their emissions and production. Typically, facilities will understand their emissions situation for the compliance period soon after 30 June, and can plan their compliance strategy.
- **EITE status application:** This will be a new application to be assessed in conjunction with any MYMP application that the facility may also submit.
 - Receiving an EITE status designation does not prevent a facility from also being on an MYMP. It will only affect the magnitude of any baseline exceedance.
- **Issuing SMCs**: SMCs will be issued by 31 January, except where there are outstanding issues regarding an NGER report.
 - Most NGER reports are validated by the end of January following the compliance year.
- **Borrowing application**: due 28 February, giving facilities an opportunity to source ACCUs or SMCs prior to notification.
 - The borrowing application would be settled by the CER by 31 March, taking account of any SMCs and ACCUs surrendered by the facility (see section 4.5).
- ACCU and SMC surrender: extended by one month to enable sufficient time for SMCs to be traded prior to the compliance date. The CER compliance publication has also been extended.

Administrative dates for baseline applications and compliance would be amended and added to accommodate Safeguard Mechanism reforms.

5 Tailored treatment for emissions-intensive, trade-exposed businesses

The treatment of emissions intensive, trade exposed (EITE) facilities will be a significant aspect of the reformed Safeguard Mechanism. It is important to ensure that Australian businesses are not competitively disadvantaged relative to international competitors, and that emissions do not 'leak' overseas. This is considered in the context of an increasingly decarbonised world, where competitiveness will increasingly depend on being a low emissions producer.

This section sets out how it is proposed that EITE facilities will be defined (section 5.1) and provided tailored treatment (section 5.2).

5.1 Defining emissions-intensive, trade-exposed facilities

The Government consulted on two broad approaches to the designation of EITE facilities.

The first is an activity-based approach similar to that currently used under the Renewable Energy Target (RET).²⁴ The second is a facility-by-facility designation providing tailored treatment for trade exposed facilities that face material new costs due to the reforms.

Submissions were varied on this question. Some supported a facility-specific approach, while others preferred an activity-based approach—in particular, simply using the list of activities currently used under the RET.

A sector-wide approach to EITEs would have the benefit of providing business certainty sooner. However, it will not cater for the significant variability in the characteristics of individual facilities that operate within a sector, and has the potential to create significant winners and losers within each sector covered by the Safeguard Mechanism. A facility-specific approach to EITE assistance is therefore more appropriate.

Glencore

The current EITE assistance framework is not fit for purpose. The current list of EITEs was developed for the RET. The list focuses on activities that are significantly exposed to electricity costs. There should be no expectation that an activity eligible for EITEs assistance in the RET should also be eligible in the Safequard.

Grattan Institute

bp agrees with the consultation paper that the definition of an EITE should reflect the specific design of the safeguard mechanism (which is different to the Renewable Energy Target and previous carbon pricing policies).

bp

The ASI supports the continuation of the established methodology for defining EITEs, currently used for the Renewable Energy Target (RET), which combines trade exposure and emissions-intensity metrics at the industry level. This approach would be simple and would recognise the significant effort undertaken by facility operators and government to assess facilities when the methodology was originally established.

Australian Steel Institute

The Government does not consider the RET activity list to be suitable for the Safeguard Mechanism, due to:

- **out-of-date**: the RET list was finalised in 2009 and based on data that will be between 15 and 20 years old by the time Safeguard Mechanism reforms commences on 1 July 2023; and
- **different emissions coverage**: it included the cost of scope 2 (electricity use) emissions which are not covered by the Safeguard Mechanism and were based on a significantly more emissions intensive grid than exists today.

The previous consultation paper noted that the RET activity list could be updated, however we do not consider an activity level assessment to be a good proxy for scheme impact at each facility. Under the proposed design set out in this paper, impacts will vary among facilities both within and between sectors. Some will receive credits and gain a financial benefit, while others will face

²⁴ https://www.cleanenergyregulator.gov.au/RET/Scheme-participants-and-industry/emissions-intensive-trade-exposed-activity-information-for-companies/eligible-activities

exceedance and incur related costs. These differences are likely to increase through the transition period to 2030.

Noting these differential impacts between facilities and the strong preference from industry for assistance to recognise the challenges of trade exposure, we propose two categories of facilities that will receive assistance to manage competitiveness issues and carbon leakage risks:

- Category 1: Trade Exposed facilities. Trade exposure status is determined at an activity level. A
 Trade Exposed activity list is set out in the exposure draft Safeguard Mechanism Rule²⁵ that
 accompanies this paper (covering around 80% of existing facilities).
 - These are activities that relate to a commodity with a trade share above 10 per cent, where:

trade share = value of imports and exports ÷ value of domestic production

- Category 2: Trade Exposed Baseline Adjusted facilities. Trade Exposed Baseline Adjusted facilities are those with an elevated risk of carbon leakage. They will be assessed using a twostep process:
 - Step 1: Confirm the facility is trade exposed (as per the Trade exposure activity list)
 - Step 2: The effect of the reformed scheme on the facility exceeds a cost impact threshold (set out in Section 5.2 below)

Two categories of facilities would be given access to tailored treatment to manage competitiveness and carbon leakage risks:

- Trade Exposed facilities, which will include all facilities undertaking a trade exposed activity;
- **Trade Exposed Baseline Adjusted** facilities, which are a subset of trade-exposed facilities facing an elevated risk of carbon leakage.

5.2 Assistance for EITE facilities

Trade Exposed facilities

Trade Exposed facilities will be supported through the formation of a dedicated \$600 million Safeguard Transformation Stream within the Powering the Regions Fund (PRF).

This will be a competitive grants program linked to the reformed Safeguard Mechanism, acknowledging the 'hard to abate' nature of many Safeguard facilities. The program will provide a range of funding opportunities to support on-site decarbonisation activities across the full spectrum of technological maturity on a technology neutral basis²⁶.

The broad application of this grant funding across Trade Exposed facilities is consistent with feedback from a number of stakeholders that it is preferable for EITE assistance to be provided in a way that is external to the scheme, as this maintains an incentive to reduce emissions.

²⁵ See p 39 and 40 of the exposure draft of the *National Greenhouse and Energy Reporting (Safeguard Mechanism) Amendment (Reforms) Rules 2023.*

²⁶ It does not support facilities to purchase ACCUs/SMCs.

The MCA supports the use of the Powering the Regions Fund to support EITE facilities to uptake new low emissions technologies in mining and other sectors, which contribute to Australia's emissions reduction ambitions. Specific consideration should be given to how to incentivise electrification as part of the implementation of transformative technology.

Minerals Council of Australia

Investment in low-emissions technology for EITE facilities assists them to meet their obligations while not endangering achievement of the SM target.

Energy Efficiency Council

Rio Tinto supports the proposed low emissions technology funding as a complementary policy to the reformed Safeguard Mechanism, alongside levers within the reformed Safeguard mechanism to support the high levels of investment required in abatement and to manage the timetable for technology development and deployment.

Rio Tinto

The Government will consult further on the design of the Safeguard Transformation Stream to ensure it is fit for purpose and best complements other government finance and funding mechanisms and policies. It is recognised that many existing trade exposed facilities are part of strategic national industries, such as metals, chemicals, cement manufacturing and critical minerals, that provide key inputs to clean energy supply chains and are important to capturing the benefits from a global net zero economy.

All Safeguard facilities will have preferential access to the remaining PRF funding, for example through additional weighting in the criteria for assessment, as well as continued access to a variety of other sources of funding and finance such as ARENA. In addition, independently governed investment vehicles—such as the National Reconstruction Fund and the CEFC—will be encouraged to prioritise investments that support businesses to meet their obligations under the Safeguard Mechanism.

Trade Exposed Baseline Adjusted facilities

The second category of EITE facilities acknowledges that some Trade Exposed facilities will face more significant scheme impacts, particularly after the first few years of the scheme and in those industries with limited currently available technology to reduce emissions.

In addition to receiving access to the Safeguard Transformation Stream, these facilities can apply for a lower baseline decline rate to moderate the potential scheme costs.

Initially, it appears that a model that recognises trade competitiveness cost impacts through the rate of decline is a sensible approach and one that can be assessed and reviewed through a phased approach as technologies develop and global commitments to decarbonisation accelerate.

Australian Industry Greenhouse Network

The application of differentiated decline rates, coupled with direct funding of low emissions projects (e.g. under the new Powering the Regions Fund) where appropriate, would also be a simple and direct approach to providing support.

Origin Energy

A differentiated decline will encourage decarbonisation projects investment but allow for the lag time required for technology development and implementation, particularly for industries dependent on electrification, where the generation and transmission are not yet sufficient.

Australian Aluminium Council

The combination of baselines, access to finance and potentially slower baseline declines for a narrowed definition of EITE may well be sufficiently functional to avoid a loss of competitiveness during the early years of a reformed Safeguard.

Ai Group

The baseline decline rate 'discount' will vary, depending on how impacted a particular facility is. This will be determined using a cost impact metric described in section 5.3 below. The discount will start applying when the cost impact metric first exceeds 3 per cent and reach a maximum discount value when the impact metric meets 8 per cent. These percentages have been conservatively calibrated to minimise carbon leakage risks.

Given the design of the scheme, including starting largely with site specific emissions intensities, it is expected that very few facilities would initially meet these thresholds in the early years of the reformed scheme. Overall, the impact on revenue for the vast majority of facilities in the period to 2030 is expected to be less than these thresholds. However, a small number of facilities could meet this threshold in the medium term, depending on take up of abatement opportunities and commodity prices.

The minimum baseline decline rate for Trade Exposed Baseline Adjusted facilities is 2 per cent, representing a 2.9 percentage point discount on the standard decline rate (4.9 per cent). It is important that Trade Exposed Baseline Adjusted facilities continue to have a baseline decline, even if moderated—this maintains appropriate abatement incentives and ensures that all facilities are contributing to Australia's emission reduction targets.

Box 5.1: Differential baseline decline rates for Trade Exposed Baseline Adjusted facilities

Each year a Safeguard facility's baseline will be multiplied by an Emissions Reduction Contribution (ERC), declining from 1 to 0 over time.

The ERC is ordinarily reduced each year by a decline rate (DR) of 0.049 (See Section 6).

The following is a worked example of how a differential decline rate might be calculated for a hypothetical facility designated as a Trade Exposed Baseline Adjusted facility.

Facility A produces widgets and, in 2026/27, its cost impact metric (**CI**_A, scheme cost as a percentage of revenue) is 3.5 per cent, exceeding the 3 per cent cost impact materiality threshold (**CI**_m) for Trade Exposed Baseline Adjusted facility status.

To determine Facility A's moderated ERC, a ratio of cost impacts (**RCI**) is calculated from these percentages and the upper bound of the cost impact range, referred to as the significant cost impact percentage (**CI**_s), as set out below:

RCI =
$$\frac{CI_A - CI_M}{CI_S - CI_M}$$

= $\frac{[3.5 - 3.0]}{[8.0 - 3.0]}$
= **0.1**

The facility's ERC had been 0.853 for 2025/26 (**ERC**_{A,26}). The ERC would have decreased by the default decline rate (0.049) in 2026/27, but obtaining Trade Exposed Baseline Adjusted facility status entitles the facility to obtain a higher ERC for t=FY27 (**ERC**_{A,27}) as set out below:

$$ERC_{A,27} = ERC_{A,26} - DR + RCI \times (DR - DR_m)$$
$$= 0.853 - 0.049 + 0.1 \times (0.049 - 0.02)$$
$$= 0.8069$$

 DR_m is the minimum available decline rate of 2 per cent.

Facility A subsequently has a slightly higher ERC that applies for three years (2026/27 to 2028/29). This reflects the facility's cost impact value, which has just only exceeded the minimum materiality threshold for the cost impact test.

Due to the dynamic nature of emissions intensity, revenue, costs and facility baselines, any designation of a facility as having Trade Exposed Baseline Adjusted status will be time-limited, with that status reviewed periodically. Conversely, facilities that hadn't previously met the criteria might become eligible over time and could then apply for tailored treatment.

Once obtained, the status would apply for a three year period. A number of submissions raised concerns about the administrative burden and year to year variability of revenue and costs and the Government considers that a three year period maintains the right balance between targeting assistance to those that need it and minimising administrative burden.

Trade Exposed facilities and Trade Exposed Baseline Adjusted facilities will have access to an initial, dedicated \$600 million Safeguard Transformation Stream of the PRF; and all Safeguard Mechanism facilities will have preferential treatment for access to other PRF streams, where they are eligible, such as through additional weighting in the criteria for assessment.

Trade Exposed Baseline Adjusted facilities would be eligible to apply to the Clean Energy Regulator for a discounted decline rate set based on a scheme impact. The minimum decline rate would be two per cent each year.

5.3 Applying for Trade Exposed Baseline Adjusted status

Cost impact metric

A facility can apply to be 'Trade Exposed Baseline Adjusted' if it is trade exposed and if it exceeds the lower threshold of the cost impact metric in a particular year.

The proposed cost impact metric for a particular year is set out below:

Cost impact metric = scheme cost for a year / revenue in that year.

This is a simple, transparent metric that can be readily calculated by facilities and provides a strong indicator of the risk of carbon leakage for a particular facility. Its simplicity also allows third parties, including auditors and the Clean Energy Regulator to be assured of the integrity of the information. Alternative measures such as value added and profit also provide a strong indicator of carbon leakage risks but are far more complex to calculate at a facility level and are much more opaque for external parties.

A carbon cost intensity calculation tries to take account of the fact that with a baseline in place a Safeguard facility faces potential out-of-pocket costs only on the fraction of its emissions above that baseline.

Ai Group

Scheme costs

Scheme costs for a financial year will be determined by the facility's pre-application exceedance for the year—this is the exceedance that would occur with the facility's existing decline rate before any adjustment to its Emissions Reduction Contribution is made for the year. If the facility is successful in its application and receives a reduced baseline decline rate, the actual number of certificates it is required to acquire will be reduced.

The pre-application exceedance is multiplied by the Safeguard Mechanism default certificate price to determine an estimate for the cost of compliance for the year.

The Safeguard Mechanism default certificate price is a new concept creating an estimate for the price that Safeguard Mechanism facilities might pay in that compliance year. It is expected that this figure would be published on the Department of Climate Change, Energy, the Environment and Water's website by 30 June each year based on expected certificate costs (both SMCs and ACCUs) for that period. It is intended that the default certificate price would be a realistic midpoint for Safeguard facilities that sought to purchase certificates during the compliance period, though some facilities may be able to procure certificates for less and some may need to spend more. Further, some facilities with a liability may have sibling Safeguard facilities creating SMCs such that they may receive these certificates with no funds being exchanged—these facilities will still be able to use the default certificate price.

The Safeguard Mechanism default certificate price is different from the cost containment measure discussed in Section 4.7 above. That number is intended to prevent excessive compliance costs under the reformed scheme, whereas the default certificate price is intended to estimate the average price a Safeguard facility will pay for compliance units within a given compliance period. The

process for the development of the default certificate price will be developed and consulted on prior to the first publication of the price in June 2024.

Facility revenue

Facility revenue for a compliance period is the revenue associated with the facility's outputs produced during the period. It is unlikely that facilities will have a constant price for any product across a particular year but the facility would need to determine an average price for the year for the purposes of determining revenue associated with a particular product. In some cases products will be transferred "internally" between facilities within the same corporate group and an appropriate market price will need to be attributed to the product.

Application process

Applications for Trade Exposed Baseline Adjusted status are proposed to be due by the first 31 October after the year for which the status is being sought e.g. an application starting in the 2027-28 year would be due by 31 October 2028.

The application will need to be accompanied by an independent audit report providing assurance over information in the application, including the revenue values, and confirm that all eligibility criteria have been met.

Upon receipt of a completed application, the Clean Energy Regulator must take all reasonable steps to ensure a decision is made on the application within 60 days. This is to allow for a new decline rate to be set for the facility and for the facility's Responsible Emitter to know the facility's revised final liability for that period ahead of the compliance deadline - 1 April.

A facility's decline rate will then be locked in for a three year period. A facility may seek to re-apply for Trade Exposed Baseline Adjusted status with a revised decline rate before that three year period has run its course. A facility may find that further baseline declines or other changes in circumstances mean that it may then be eligible for a lower baseline decline rate.

Facilities would be able to apply for Trade Exposed Baseline Adjusted status based on the facility's cost impact metric exceeding the threshold.

Costs would be determined by reference to the default certificate price published in June of each year.

5.4 Exploring additional policy options to address carbon leakage

In December 2022, the European Union reached an agreement to implement a carbon border adjustment mechanism (CBAM). CBAMs are also being considered in a number of other jurisdictions around the world as a measure to prevent carbon leakage from countries implementing carbon reduction schemes. They operate by imposing an import tariff and/or export rebate on trade with countries without an equivalent carbon constraint. The European Union's CBAM will focus on an import tariff, initially for a limited set of products—cement, iron and steel, aluminium, fertilizers, organic chemicals, plastics, electricity, hydrogen and ammonia.

The consultation paper did not discuss developing an Australian CBAM, but many submissions suggested a CBAM would be a preferable way to manage carbon leakage, particularly in the medium to long term.

Ai Group considers that while the approaches to Emissions Intensive Trade Exposed industries considered in the Paper may suffice in the early years, a better solution will be needed before long. An Australian Carbon Border Adjustment Mechanism could be that answer.

Ai Group

Australia's use of CBAMs to address trade exposure is worthy of consideration, as part of a broader international trade policy discussion in an increasingly decarbonised global context.

Business Council of Australia

A border adjustment framework may provide an equitable, transparent way to recognise and adjust for competitiveness issues from carbon costs.

Australian Industry Greenhouse Network

The Government should consider a carbon border adjustment mechanism. This would require importers to pay an equivalent carbon price to local producers, levelling the playing field and preventing carbon leakage.

Grattan Institute

Other policy measures that directly address trade exposure, such as a carbon border adjustment mechanism, will be required to address issues around 'carbon leakage' and should be developed as soon as possible.

Cement Industry Federation

The Government recognises the strong stakeholder interest in an Australian CBAM. While the Government has proposed approaches to address carbon leakage as part of its proposed design of the reforms, it is important to consider whether these will remain appropriate over time. Recognising this strong stakeholder interest in an Australian CBAM, the Government will undertake a review to explore long term policy options to prevent carbon leakage that could complement the Safeguard Mechanism reforms. The review will commence in 2023 and will include stakeholder consultation. The Government will not commit to any particular future policy option ahead of this review and will also consider relevant issues with Australia's international trade relationships and obligations with any policy options.

The Government recognises strong stakeholder interest in an Australian CBAM, as well as design and implementation challenges, and will undertake a review commencing in 2023 to explore policy options to further address carbon leakage.

6 Declining baselines to deliver the target

The consultation paper indicated that baseline decline rates can only be settled in the context of other policy settings, noting a possible range of 3.5 to 6 per cent each year. Using the final design parameters outlined above, a uniform, annual decline rate of 4.9 per cent each year is expected to meet the Safeguard's share of the national emissions budget and the 2030 point target. This decline rate reflects the following policy choices:

 Baseline framework: the Safeguard Mechanism will continue to operate under a productionadjusted baseline setting framework.

- Reserve: a portion of the Safeguard emissions budget will be 'held back' to accommodate higher-than-expected production growth at existing and new facilities, both of which are uncertain, as well as differential decline for Trade Exposed Baseline Adjusted facilities.
- **Starting point**: aggregate Safeguard Mechanism emissions are projected to be 143 Mt in 2022-23 compared with 137 Mt in 2020-21.
- Projected emissions: In the absence of the reforms, based on Australia's Emissions Projections 2022, emissions from existing Safeguard facilities are projected to decline to 136 Mt in 2029-30.
 With new facilities included²⁷, Safeguard emissions are projected to grow to 146 Mt in 2029-30.
- **Decline trajectory**: A steady decline rate will apply, so baselines will decline at the same rate each year to 2030.
- **EITEs treatment**: concessional baseline decline rates will be available for some EITE facilities.

Under a production-adjusted baseline framework, with a uniform decline rate, inter-annual variations in production will mean that baselines will not follow a straight line path to the 2030 point target. The presence of the reserve, which will include a portion for higher-than-expected production growth, is designed to mitigate against the risk of subsequent adjustments to the decline trajectory. However, depending on whether new facilities commence as planned, as well as actual production levels from facilities, it may be necessary to adjust the decline rates for the end of the target period; 2028-29 and 2029-30. In considering whether any adjustment is appropriate, the Government would take advice from the Climate Change Authority during 2026-27—including as presented in the latest Annual Climate Change Statement to Parliament—to enable consultation and provide sufficient notice.

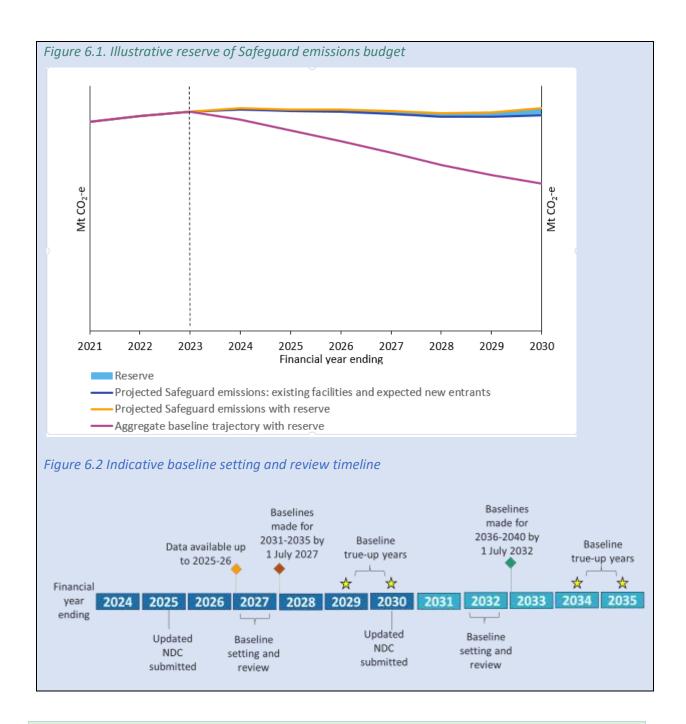
Post-2030 decline rates will be set in five-year blocks, with the process for setting them aligned with updates to Australia's Nationally Determined Contribution (NDC) under the Paris Agreement and Australia's commitment to net zero by 2050. For example, decline rates for 2031 to 2035 would be consulted on during 2026-27 following Australia's required NDC update in 2025. This process to set the next 5 years of decline rates and monitor progress of the current target period would be repeated through 5 yearly baseline setting reviews.

Box 6.1: Reserve and baseline setting review

A manageable portion of the Safeguard Mechanism emissions budget will be kept in reserve to manage uncertainty in projected production levels, and expectations of new facilities (commencement time, emissions and output). A portion of the reserve will be based on Trade Exposed Baseline Adjusted facilities accessing a concessional decline rate.

The five-yearly baseline setting and review process will balance making baseline decline rates on the latest available information with providing certainty to facilities and the market.

²⁷ This level reflects the abatement task in 2030 based on current expectations of new facilities in the absence of the Safeguard reforms. Once best practice benchmarks are developed and applied to new entrants, projected emissions from new entrants will reduce.



In general, a uniform, 4.9 per cent decline rate would apply to Safeguard Mechanism baselines each year to 2029-30. This delivers an estimated 205 million tonnes of abatement and is calibrated to meet the 1,233 Mt CO_2 -e emissions budget and 100 Mt CO_2 -e 2030 point target.

Decline rates for 2030-31 to 2034-35 would be the subject of consultation in 2026-27 following Australia's required NDC update in 2025, and made by 1 July 2027.

7 Strengthening enforcement

7.1 Civil penalty

The Safeguard Mechanism currently includes a range of enforcement measures, including enforceable undertakings, infringement notices, a court injunction or a civil penalty. The CER can

access these tools as appropriate, taking account of individual circumstances, such as whether the non-compliant facility is demonstrating good faith. The Government has considered updating enforcement provisions—particularly in relation to civil penalty amounts—to strengthen enforcement arrangements and ensure penalties are sufficient to deter non-compliance.

Currently, the civil penalty for an excess emissions situation is based on the number of days of non-compliance, rather than the scale of exceedance. This means that 1 tonne of excess emissions could be judged an equal offence to 100,000 tonnes of excess emissions.

The Government proposes to update the civil penalty to base it on both the quantity of excess emissions *and* the number of days of non-compliance. This better reflects the environmental impact of the excess emissions situation. The maximum civil penalty will be set at 1 penalty unit per tonne of excess emissions per year (see Box 7.1). From 1 January 2023, a penalty unit will be set at \$275.

Box 7.1: Enforcement penalty formula

Penalty = 1 penalty unit times tonnes of excess emissions

Where:

- **tonnes of the excess emissions** is the difference between the net emissions number and the baseline emissions number for the facility for the monitoring period (usually one year); and
- a penalty unit is currently \$275.

The infringement notice charge will also be updated. It works in conjunction with civil penalties and should be much less than the civil penalty, given it is not imposed by a court. The Government proposes to set the maximum infringement notice charge at one-third of the maximum civil penalty to a maximum of 150,000 penalty units.

While stronger penalties are an important deterrent, the Government does not expect any facilities to pay civil penalties or infringement notice charges, as these will be more expensive than the cost of compliance. Businesses cannot use these enforcement measures to avoid compliance. 'Make good' provisions will be retained to help ensure Safeguard Mechanism obligations are met. A business would be liable for a civil penalty equal to 100 penalty units each day that an excess emissions situation is not resolved, for a maximum of two years. This means paying a penalty does not discharge the compliance obligation—a facility is subject to the obligation to surrender sufficient ACCUs or SMCs. It is a decision for the CER whether to take enforcement action in court, by infringement notice or by injunction.

The civil penalty, while not expected to be imposed as it will be more expensive than the cost of compliance, would be updated so it reflects both the number of days in exceedance *and* the quantity of excess emissions.

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

7.2 Anti-avoidance

Emissions limits are set at a facility level. How a facility is defined plays an important role in determining Safeguard Mechanism obligations. The 'facility' definition is set out in the NGER Act and Regulations and applies to both emissions and energy reporting under NGERS and Safeguard

Mechanism compliance. It is necessarily broad and is intended to give businesses a degree of flexibility to accommodate complex and varied operations, ranging from large industrial sites to transport operations, pipelines and landfills.

To ensure Australia can reliably meet its climate targets, it is important that the Safeguard Mechanism continues to cover all large industrial facilities. Businesses should not be able to redefine a facility—for example, by breaking it up into smaller facilities—to avoid coverage. The Government proposes to introduce anti-avoidance measures that would prevent a business from defining 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.

Further, a facility should not be able to attach itself to a grid-connected power station to avoid Safeguard Mechanism obligations. Grid-connected power stations are subject to a sectoral baseline rather than individual emissions limits. The Government will clarify 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. This will prevent a facility from defining itself as part of a grid-connected electricity generator to avoid compliance obligations.

Anti-avoidance measures would be introduced to prevent a business from defining, or redefining, a facility with the intention of avoiding Safeguard Mechanism obligations.

8 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.

The last consultation paper indicated that Safeguard crediting may not be suitable for landfills because legacy emissions are not covered, and many landfills have established ACCU projects which are credited based on both legacy and non-legacy emissions.

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 $100,000 \text{ t CO}_2$ -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.

There are three methods for reporting under NGER the methane generated by landfills fugitive emissions. Under the method 1 used by most landfill reporters there is a 75 per cent cap applied to the capture efficiency. This cap was established based on the best available information on landfill capture system performance and in consultation with the landfill and gas capture system operators.

When capture efficiency is above the 75 per cent cap, it is assumed that modelled emissions generation is not an accurate representation of actual emissions generation at the landfill. In this circumstance, a landfill's methane emissions calculation becomes the methane captured divided by 75 per cent. For these landfills, increasing capture efficiency above 75 per cent will lead to the

calculated net emissions increasing. The landfill operator has the option to move to higher order method which allows for a higher capture efficiency cap to apply or to review their input data under method-1 to ensure that this is accurate and representative of the landfill operational circumstances as possible.

Reviewing the capture efficiency cap under method-1 is a priority for NGER updates. Until this is changed there is essentially a cap on the emissions reductions possible at landfill facilities which report capture efficiency greater than 75 per cent and opt to continue using method-1; this has the effect of limiting any SMCs that could be issued for higher level gas capture rates.

Long term arrangements for landfills covered by the Safeguard Mechanism will be considered prior to the 2026-27 Safeguard Mechanism review (during the period 2023-24 to 2025-26). Over this period, landfill baselines will decline at the same rate as other facilities but landfills will not be eligible to generate SMCs. This is to provide time to consult with the sector and take account of any lessons learned as more landfill facilities are covered by the Safeguard Mechanism.

During this period (from 2023-24 to 2025-26), ACCU projects at landfills covered by the Safeguard Mechanism will be treated in the same way as other Safeguard facilities:

- New projects that reduce covered emissions at Safeguard facilities will no longer be able to be registered.
- **Existing projects** that reduce covered emissions at Safeguard facilities can continue to generate and sell credits for their existing crediting period.
- Existing projects that reduce covered emissions at Safeguard facilities will not be able to enter into **new contracts** for the Government purchase of ACCUs.
- Existing **double counting** provisions will be retained, so any ACCUs generated from existing projects that reduce covered emissions at a Safeguard facility will be added back onto that Safeguard facility's net emissions number.
- **Deemed surrender** provisions will be grandfathered for two years from commencement of the reforms, then removed.

The double counting provision—that requires ACCUs issued in relation to a project at that facility back on to the facility's net emissions—will be amended so only the amount of abatement related to covered emissions is added back. This will continue to prevent the abatement of covered emissions from ACCU projects at Safeguard facilities from being counted twice, while ensuring that ACCUs associated with legacy emissions (not covered by the scheme) are not added back on.

Given the overlap with ERF projects, treatment of legacy waste and existing baseline arrangements, landfills would not be eligible to generate Safeguard Mechanism Credits from 2023-24 to 2025-26.

Consistent with other Safeguard Mechanism facilities, landfills covered by the Safeguard Mechanism could continue existing ERF projects that reduce covered emissions and existing ERF contracts, but not register new projects that relate to covered emissions, nor extend existing crediting periods, nor enter new government contracts during this period. Deemed surrender provisions would be grandfathered for two years, then removed.

Landfill baselines would decline at the same rate as other facilities.

The provision to add ACCUs issued in relation to the ERF project back to the net emissions of the facility would be amended to include only abatement of covered emissions.

Attachment A: Table of legislative provisions

Policy position	Relevant provisions in Bill or Rules
Safeguard Mechanism's share of 2030 targets	Item 34 of Schedule 1 (new sections 25-31) of the National Greenhouse and Energy Reporting (Safeguard Mechanism) Amendment (Reforms) Rules 2023 (Safeguard Amendment Rules).
	The Safeguard abatement task is reflected in the <i>emissions reduction contribution</i> parameter used to decline a facility's baseline.
Setting baselines for existing facilities	Item 34 of Schedule 1 (new sections 10-18) of the Safeguard Amendment Rules.
Transition from existing arrangements	Item 34 of Schedule 1 (new sections 10-12) of the Safeguard Amendment Rules.
	The parameter <i>h</i> is the proportion in the baseline calculation transitioning from using facility-specific to default emissions intensities.
Calculating site-specific emissions intensity values	Item 34 of Schedule 1 (new sections 13-22) of the Safeguard Amendment Rules.
Setting baselines for new facilities	Item 34 of Schedule 1 (new section 23) of the Safeguard Amendment Rules.
Issuing Safeguard Mechanism Credits	Included in the Safeguard Mechanism (Crediting) Amendment Bill 2022 (Item 34 of Schedule 1, new section 22XNA and 22 XNC of the NGER Act).
	Also, item 34 (new sections 42-43) of the Safeguard Amendment Rules.
Trading Safeguard Mechanism Credits	Included in the Safeguard Mechanism (Crediting) Amendment Bill 2022 (Item 25 of Schedule 2, new sections 48A-48E of the ANREU Act) and supported by the Australian National Registry of Emissions Units Rules 2023 (ANREU Rules 2023).
Using Safeguard Mechanism Credits	Included in the Safeguard Mechanism (Crediting) Amendment Bill 2022 (Item 30 of Schedule 1, new paragraph 22XM(1)(aa) of the NGER Act).
Borrowing from future baselines	Item 34 of Schedule 1 (new sections 37-40) of the Safeguard Amendment Rules.
Prevention of new ACCU projects solely relating to Safeguard covered emissions	Item 4 (new section 20) of the <i>Carbon Credits (Carbon Farming Initiative) Amendment (No. 1) Rules 2023</i> (CFI Amendment No. 1 Rules 2023).

Restriction on entry into new contracts for Government purchase of ACCUs relating to Safeguard covered emissions	Provided for by the Safeguard Mechanism (Crediting) Amendment Bill 2022 (Item 1 of Schedule 4, new subsection 20C(3) of the Carbon Credits (Carbon Farming Initiative) Act 2011), together with Item 1 (new section 10A) of the Carbon Credits (Carbon Farming Initiative) Amendment (No. 2) Rules 2023 (CFI Amendment No. 2 Rules 2023).
Grandfathering deemed surrender provisions for two years	Provided for by the Safeguard Mechanism (Crediting) Amendment Bill 2022 (Item 33 of Schedule 1, new subsection 22XN(7)), together with Item 53 of Schedule 1 (new sections 72C) of the Safeguard Amendment Rules.
Multi-year monitoring periods	Items 35-44 of Schedule 1 (amendments to sections 65, 67 and 68, and new section 69A) of the Safeguard Amendment Rules.
Cost containment measure	Item 3 of Schedule 1 (new section 11A) of the CFI Amendment No. 1 Rules 2023.
	Item 2 of Schedule 1 (new sections 11AB and 11AC) of the CFI Amendment No. 2 Rules 2023.
Compliance dates for the duty to ensure an excess emissions situation does not exist, and for applications for determinations under the scheme	Included in the Safeguard Mechanism (Crediting) Amendment Bill 2022 (Item 24 of Schedule 1). Item 34 of Schedule 1 (new section 41) of the Safeguard Amendment Rules.
Trade Exposed facilities	Item 58 (new Schedule 2) of the Safeguard Amendment Rules provides the list of trade-exposed production variables.
Trade Exposed Baseline Adjusted facilities	Item 34 (new sections 28-36) of the Safeguard Amendment Rules.
Baseline decline rates	Item 34 (new sections 25-31) of the Safeguard Amendment Rules.
Civil penalties	Included in the Safeguard Mechanism (Crediting) Amendment Bill 2022 (Items 25-26 of Schedule 1).
Anti-avoidance provision	Included in the Safeguard Mechanism (Crediting) Amendment Bill 2022 (Item 46 of Schedule 1). Item 33 (new subsection 7(3)) of the Safeguard

Glossary and acronyms

Australian carbon credit unit (ACCU) - A unit that represents one tonne of carbon dioxide equivalent (t CO₂-e) stored or avoided by a project established under the *Carbon Credits (Carbon Farming Initiative)* Act 2011.

ARENA - The Australian Renewable Energy Agency

Calculated baseline - A type of fixed Safeguard baseline that is calculated by the sum of 'production' multiplied by the 'emissions-intensity of production' for each relevant production variable nominated by the facility. It can be calculated using either prescribed production variables and default emissions intensities or facility-specific production variables and estimated emissions intensity values, or a combination.

Carbon dioxide equivalent (CO₂-e) - A standard unit of emissions used to compare the emissions from different greenhouse gases on the basis of their global warming potential.

CEFC - Clean Energy Finance Corporation

Domestic offset – Refers to an Australian carbon credit unit.

EITE - Emissions-intensive, trade-exposed

Emissions Reduction Fund (ERF) - Refers to a set of mechanisms designed to help Australia reduce its emissions. The ERF credits abatement delivered through projects undertaken in accordance with approved abatement calculation methods.

Headroom - The gap between baseline values and lower reported emissions. The term can be used both at a facility level and at an aggregated level.

Multi-year monitoring period - Safeguard facilities that exceed their baseline can apply for a multi-year monitoring period. Under a multi-year monitoring period, a facility can exceed its baseline in one year, so long as average net-emissions over a 2 or 3 year period remain below the facility's average baseline over that period.

National Reconstruction Fund (NRF) - Policy announced in June 2022 to provide up to \$3 billion investment to support renewables manufacturing and low emissions technologies.

Nationally Determined Contribution (NDC) - Emissions reduction commitments required to be submitted under the Paris Agreement, a legally binding international treaty on climate change.

Net emissions number - The number of tonnes of carbon dioxide equivalence of the total amount of covered emissions of greenhouse gases from the operation of the facility during a specified period.

Net zero – Where emissions are close to zero, with any remaining emissions re-absorbed from the atmosphere through additional actions.

NGER scheme - The *National Greenhouse and Energy Reporting Scheme* is a single national framework for reporting and disseminating company information about greenhouse gas emissions, energy production, energy consumption and other information specified under the NGER legislation.

Powering the Regions Fund (PRF) - Policy announced in June 2022 to support the development of new clean energy industries and the decarbonisation priorities of existing industry.

Production-adjusted baseline - A type of Safeguard baseline that is determined based on actual production levels. A production adjusted baseline can either be a fixed baseline based on the highest year of production during the calculated or benchmark baseline period, or annually adjusting based on actual production for each year.

Responsible Emitter - The person who has operational control of a Safeguard facility and is responsible for compliance under the Safeguard Mechanism.

Safeguard Mechanism Credit (SMC) - Credits proposed to be given to Safeguard facilities where that facility's emissions are below its baseline. These credits would be used to meet Safeguard obligations or be purchased by the Government or private entities.

Safeguard Mechanism Rule - The *National Greenhouse and Energy Reporting (Safeguard Mechanism) Rule 2015*.

Scope 1 emissions - The emissions released to the atmosphere as a direct result of an activity, or series of activities at a facility level, sometimes called direct emissions.

Scope 2 emissions - The emissions released to the atmosphere from the indirect consumption of an energy commodity, such as from the use of electricity produced by the burning of a fossil fuel in another facility, sometimes called indirect emission.