



**Australian Government**

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**Department of Climate Change, Energy, the Environment and Water**

# **Reforms to the Safeguard Mechanism**

**Regulatory Impact Analysis**

**Department of Climate Change, Energy, the  
Environment and Water**



**Australian Government**

**Department of Climate Change, Energy,  
the Environment and Water**

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# Executive summary

## Impact analysis

The Government is reforming the Safeguard Mechanism to support Australia’s largest greenhouse gas emitters to gradually and predictably reduce their emissions, delivering on an election commitment within the *Powering Australia* plan. The Mechanism will help Australia achieve a 43 per cent reduction of emissions on 2005 levels by 2030 and net zero emissions by 2050.

This Regulatory Impact Analysis (RIA) analyses three reform options, which differ primarily in the baseline setting framework and level of policy detail. Options 1 and 2 are consistent with policy design options discussed in the August 2022 Safeguard Mechanism Reforms Consultation Paper, and contain less policy detail relative to Option 3 as these were not pursued further after initial consultations. Option 3 was developed based on stakeholder consultation. The Government has used feedback received through consultation on the proposed design outlined in the January 2023 Position Paper to refine the final design of the policy. All three reform options were considered in comparison with the reference (business-as-usual) option where no reform is undertaken.

Net benefits are assessed qualitatively against the overarching objectives and policy principles of the Safeguard Mechanism reforms. All options are expected to deliver net benefits by contributing to Australia’s emissions reduction targets and providing environmental benefits to society from reduced and avoided emissions, providing the Australian business and investor community with climate policy certainty, improving competitiveness, trade and reduced borrowing costs, increasing the ability for facilities to attract green premiums and offering co-benefits for the domestic carbon market. Based on the policy principles and qualitative analysis, Option 3 is the preferred option as it best balances the overarching objectives and policy principles, is expected to achieve a significant improvement on outcomes relative to the status quo and addresses stakeholder feedback (refer Table 1). The 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.

**Table 1 RIA - Summary of qualitative impact analysis**

Policy principles and objectives	Option outcomes		
	Option 1	Option 2	Option 3
<b>Principle 1: Effective</b>	<b>Improvement</b>	<b>Improvement</b>	<b>Significant improvement</b>
1.1: Reduces emissions consistent with Australia’s targets	Achieves emissions reduction objectives of the reforms consistent with Australia’s targets		
1.2: Reduces risk of overshooting net emissions targets specified in Objects of NGER Act	Reserve	Reserve	Reserve, international best practice benchmarks, enhanced transparency and accountability
1.3: Allows policy settings to be refined over time	Phased approach	Phased approach	Allows recalibration of policy settings through a review
<b>Principle 2: Equitable</b>	<b>Improvement</b>	<b>Improvement</b>	<b>Significant improvement</b>
2.1: Baselines set on a consistent and transparent basis	Baselines set on a consistent and transparent basis	Reduced consistency and limited transparency	Baselines set on a consistent basis with transparency improving over time
2.2: Equitable distribution of costs and benefits	Disproportionately affects facilities with higher than average emission intensities	Costs and benefits distributed equitably, based on individual facility circumstances	Introduces costs and benefits in manageable increments that takes into account individual facility circumstances

2.3: Provides assistance and flexibility	Support for emissions-intensive trade-exposed facilities	Support for emissions-intensive trade-exposed facilities	Provides assistance and flexibility based on need and strategic importance
<b>Principle 3: Efficient</b>	<b>Significant improvement</b>	<b>Improvement</b>	<b>Significant improvement</b>
3.1: Incentivises lower emissions-intensive production	Encourages lower emissions-intensive production	Does not reward lower emissions-intensive facilities, disadvantages early movers, creates perverse incentives	Incentive for lower emissions intensive production increases over time
3.2: Allows market to find the lowest cost abatement	Allows market to find the lowest cost abatement		
3.3: Provides flexible compliance options	Offers flexible compliance options	Offers flexible compliance options	Offers targeted flexible compliance options and a cost containment measure
3.4: Provides policy and investor certainty	Provides stability and creates strong market signals for investment		
3.5: Reduces cost of inaction	Reduces cost of inaction including capital cost premiums and trade barriers		
<b>Principle 4: Simple</b>	<b>Mixed</b>	<b>Lower</b>	<b>Lower</b>
4.1: Baseline setting, administrative and reporting arrangements are simple and low cost	Simple framework for implementation	Increases regulatory burden through site-specific approach	Increases regulatory burden through hybrid approach
<b>Net outcome relative to status quo</b>	<b>Improvement</b>	<b>Improvement</b>	<b>Significant improvement</b>

**Outcome matrix key**

Significant improvement	
Improvement	
Mixed	
Lower	

# Introduction

## Safeguard Mechanism reforms

This Regulatory Impact Analysis (RIA) analyses options for reforming the Safeguard Mechanism to contribute to meeting Australia’s Nationally Determined Contribution under the Paris Agreement. The reforms deliver on an election commitment under Labor’s *Powering Australia* plan. Namely, to:

- adopt the Business Council of Australia’s recommendation that “emission baselines [be] reduced predictably and gradually over time” to “support international competitiveness and economic growth.” These changes will provide a supportive policy framework for industry’s own commitment to net zero by 2050,
- provide tailored treatment for emissions-intensive trade-exposed industries based on the principle of comparative impact – ensuring that exporters remain competitive, and that emissions do not ‘leak’ overseas,
- include tradeable credits for companies that stay below their baselines.

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.<sup>1</sup>

Emissions limits for individual facilities are known as baselines. The sum of all facilities’ baselines form the overall emissions constraint for the scheme. Businesses are familiar with the scheme. It has been operating for seven years. Building on the current framework will promote 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.

To date, the Safeguard Mechanism has not been effective in reducing emissions. Instead, emissions limits, known as baselines, have been set at excessive limits which not only allowed business-as-usual operations but also meant aggregate emissions from Safeguard facilities could increase. Elements of the Safeguard Mechanism will need to evolve for it to deliver large-scale, low-cost emissions reductions consistent with Australia’s climate targets.

The Government increased the ambition of Australia’s climate goals, committing to reduce national emissions to 43 per cent below 2005 levels by 2030, and reaffirming a commitment to achieve net zero emissions by 2050.

These targets have been formalised in Australia’s updated Nationally Determined Contribution (NDC) under the Paris Agreement,<sup>2</sup> and enshrined in law in the *Climate Change Act 2022*.

Australia’s new climate targets are realistic and achievable, but it will take deliberate and sustained effort to meet them. Businesses are well prepared, as the majority of companies controlling or operating Safeguard facilities

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<sup>1</sup> 28 per cent share of national emissions in 2020-21

<sup>2</sup> Australia’s Nationally Determined Contribution 2022 (<https://unfccc.int/sites/default/files/NDC/2022-06/Australias%20NDC%20June%202022%20Update%20%283%29.pdf>)

have medium- and long-term climate targets, including net zero goals, and are factoring Australian and global decarbonisation into their decisions, operations and investments.

The Government committed to the reforms taking effect from 1 July 2023.<sup>3</sup> The reforms have been designed to be effective, equitable, efficient, and simple. An extensive consultation process has included:

- a *Consultation Paper* (August-September 2022), factsheets, webinar, and 5 roundtables
- exposure draft legislation (October 2022)
  - draft *Safeguard Mechanism Reforms (Crediting) Amendment Bill 2022*,
  - draft *Carbon Credits (Carbon Farming Initiative) Amendment (Safeguard Facility Eligibility Requirements) Rules 2022*
- a *Position Paper* (January – February 2023), factsheets, webinar, and 3 roundtables
- exposure draft legislation (January – February 2023)
  - draft *National Greenhouse and Energy Reporting (Safeguard Mechanism) Amendment (Reforms) Rules 2023*,
  - draft *Carbon Credits (Carbon Farming Initiative) Amendment (No. 2) 2023*,
  - draft *Australian National Registry of Emissions Units Rules 2023*,
  - draft *Safeguard Mechanism Legislation Amendment (2023 Measures No 1) Regulations 2023*.
- Over 170 meetings over June 2022 to April 2023

Over 570 submissions have been received on the consultation paper, exposure draft legislation and position paper above.

## This RIA

This RIA:

- is intended to inform understanding of the final design, which refines the proposal outlined in the *Safeguard Mechanism Reforms Position Paper January 2023* based on stakeholder consultation and changes to strengthen the scheme,
- answers the seven RIA questions,
- presents a qualitative assessment of the regulatory impact and a quantitative regulatory burden estimate for administrative compliance costs,
- has been prepared in close consultation with the Office of Impact Analysis (OIA),
- is Certified by the Department of Climate Change, Energy, the Environment and Water (DCCEEW).

## Summary of regulatory impact analysis

This RIA analyses three reform options. Options 1 and 2 are consistent with reform options proposed in the August 2022 Consultation Paper. Option 3 reflects the final design. The Government has taken feedback received through consultation on the proposed design outlined in the January 2023 Position Paper to refine the final

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<sup>3</sup> Min. Bowen speech at AFR Energy & Climate Summit - Climate change – a shared economic plan, a shared challenge



design of the policy. All three reform options are compared with the reference (business-as-usual) option where no reform is undertaken.

Based on consultation and the qualitative assessment, Option 3 for baseline setting for existing facilities (and retaining a production-adjusted framework) was selected to best achieve the reform objectives while achieving the best balance of the policy principles. Finalisation of detailed policy design for Option 3 further establishes it as the preferred option as it:

- offers a hybrid approach to baseline setting that introduces costs and benefits gradually from scheme commencement to 2030,
- allows the market to find the lowest cost abatement wherever it occurs and encourages production where it is least emissions-intensive,
- demonstrates strong commitment to the net zero target and sends a strong market signal to investors by applying international best-practice benchmarks (adapted to the Australian context) for setting baselines for new facilities,
- introduces 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, while ensuring support is targeted and aligned to overarching emissions reduction objectives,
- retains simplicity in architecture by maintaining the existing production-adjusting framework,
- enhances broader Safeguard Mechanism transparency by mandating production-adjusted baselines for all facilities at commencement of reforms, and requiring all facilities to use Government-defined production variables,
- sets clear eligibility requirements for assistance to emissions-intensive trade-expose (EITE) facilities based on scheme impact metrics, including specific treatment for hard-to-abate, value-added manufacturing, thereby minimising scheme impacts on non-EITE facilities while maintaining clear long-term incentives for reducing all emissions,
- allows for recalibration of reform settings through a scheduled review as well as a periodic baseline setting process, to stay aligned with Australia's future NDC updates and climate targets.

# Background

## Current policy settings

The Safeguard Mechanism provides a framework for Australia’s largest emitters to measure, report and manage their emissions. It places legislated emissions limits (called baselines) on facilities that emit more than 100,000 tonnes of carbon dioxide equivalent each year, which encourages facilities to manage their emissions. Facilities covered by the Safeguard Mechanism account for approximately 28 per cent of Australia’s emissions, including facilities in the mining, oil and gas production, manufacturing, transport and waste sectors (see Figure 1).

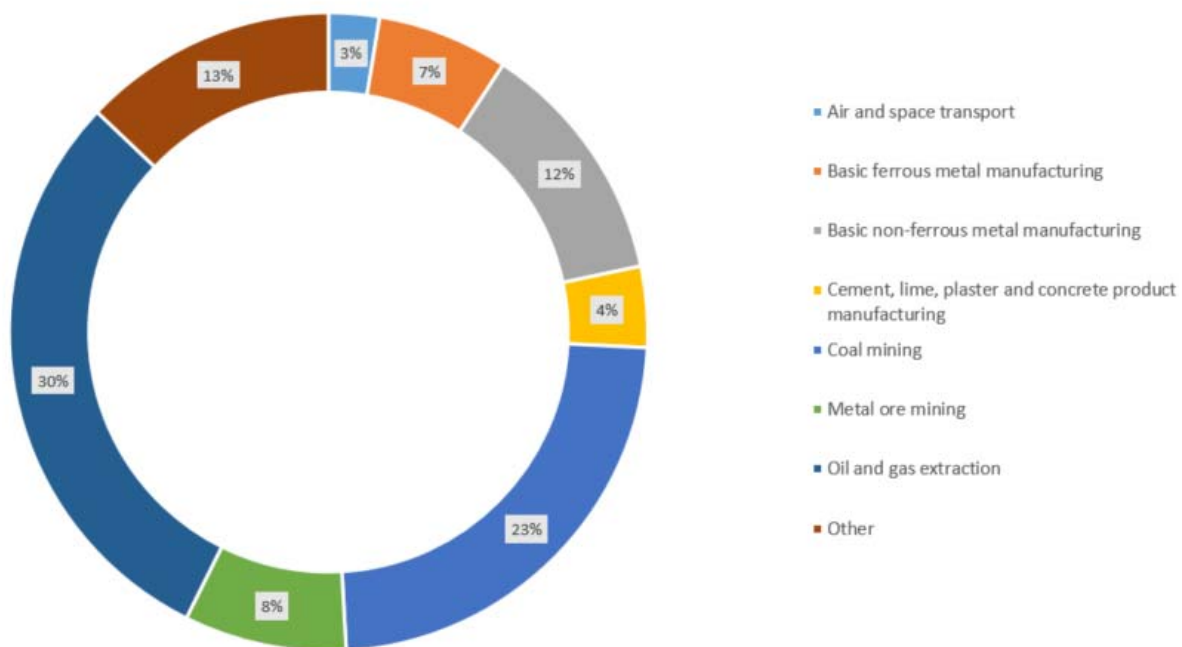


Figure 1 Safeguard facility emissions – sectoral breakdown<sup>4</sup>

Only emissions that are produced on-site at a facility count towards the facility’s compliance position. These are called ‘Scope 1 emissions’. Emissions that are produced off-site are not covered by the Safeguard Mechanism. These can include emissions from generating the electricity the facility buys from the grid (‘Scope 2 emissions’) or emissions the facility’s customers produce when using its products (‘Scope 3 emissions’).

Around 215 large industrial facilities are covered by the Safeguard Mechanism.<sup>5</sup> Each year, every large facility within the Mechanism needs to prove that their net emissions for that year are below their baseline. Each facility reports their emissions to the Clean Energy Regulator, which publishes the results on its website.

<sup>4</sup> Source: [2020-2021 Safeguard facility data](#)

<sup>5</sup> Individual grid-connected electricity generators are not covered as long as total emissions from grid-connected electricity generators do not exceed the sectoral baseline that applies to all electricity generators connected to one of Australia’s main electricity grids. The Safeguard Mechanism does cover electricity generators that produces more than 100,000 tonnes CO<sub>2</sub>-e in a year and are not connected to one of Australia’s main electricity grids.

## Coverage threshold

The Government confirmed the current coverage threshold of 100,000 tonnes of Scope 1 (direct) carbon dioxide equivalent (CO<sub>2</sub>-e) emissions each year will remain in place under the reformed scheme. DCCEEW analysis shows that a lower coverage threshold – of 25,000 tonnes or 50,000 tonnes – would change the nature of facilities covered by the scheme without covering significantly more emissions. This would increase the administrative and regulatory burden by requiring many smaller businesses to become compliant, which would include the submission of new reports and applications to the Clean Energy Regulator. New production variables and emissions intensity values would need to be defined for several industrial sectors not yet covered under the Safeguard.

Using emissions data reported for 2020-2021 under the NGER scheme and the National Greenhouse Gas Inventory:

- At a coverage threshold of 50,000 tonnes, around 110 new facilities would be covered, covering only an additional 1.6 per cent of Australia's national emissions.
- If the coverage threshold is lowered to 25,000 tonnes, a total of around 250 new facilities would be covered, covering only an additional 3 per cent of national emissions.<sup>6</sup>
- This compares with the 100,000 tonne threshold, which covered 136.9 million tonnes of CO<sub>2</sub>-e in 2020-21 from 212 facilities.

The Safeguard Mechanism is part of the *National Greenhouse and Energy Reporting Act 2007*.<sup>7</sup> Together with the emissions reporting obligations under the Act, the Safeguard Mechanism provides a framework for Australia's largest emitters to measure, report and manage their emissions. The Safeguard Mechanism places a legislated obligation on Australia's largest greenhouse gas emitters to keep net emissions below their emissions limit (or baseline). This obligation implements the first outcome in the second object of the Act *To contribute to the achievement of Australia's greenhouse gas emissions reduction targets by ensuring that each of the following outcomes (the safeguard outcomes) are achieved:*

- (a) *net covered emissions from the operation of a designated large facility do not exceed the baseline applicable to the facility.*

Any facility that emits more greenhouse gases than allowed by their baseline must take action to reduce their emissions. This can include purchasing Australian Carbon Credit Units (ACCUs) and surrendering them to the Government. Each ACCU represents one tonne of CO<sub>2</sub>-e that has been stored or avoided.<sup>8,9</sup>

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<sup>6</sup> Based on reported NGER 2020-2021 data, excluding grid-connected electricity generators and all waste treatment, disposal and remediation services, and National Greenhouse Gas Inventory, December Quarterly FY 21 data

<sup>7</sup> The Safeguard Mechanism was established through amendments to the National Greenhouse and Energy Reporting Act 2007. The detailed design is set out in the National Greenhouse and Energy Reporting (Safeguard Mechanism) Rule 2015. The design and operation of the Safeguard Mechanism was developed through extensive consultation with affected businesses. Its operation was outlined in the Emissions Reduction Fund White Paper released in April 2014 and refined through a consultation paper released in March 2015. It was legislated in November 2014, with the Rule released in September 2015. The Safeguard Mechanism commenced on 1 July 2016.

<sup>8</sup> Many different gases contribute to climate change. The phrase carbon dioxide equivalent (CO<sub>2</sub>-e) is a standard unit of emissions used to compare the emissions from different greenhouse gases on the basis of their impact on global warming.

<sup>9</sup> In July 2022, the Government commissioned the Independent Review of ACCUs (the Review) to ensure that ACCUs and the carbon crediting framework have integrity and maintain a strong and credible reputation. The Review concluded that the

# 1. What is the problem you are trying to solve?

## The problem

Safeguard covered facilities account for about 28 per cent of Australia's emissions (136.9 Mt CO<sub>2</sub>-e in 2020-21) and are projected to grow at an annual average growth rate of 0.7 per cent between 2020-21 and 2029-30 in the absence of the reforms.<sup>10</sup>

Emissions from Safeguard covered facilities must reduce for Australia to meet our enhanced 2030 target and commitment to net zero by 2050.

Current policy settings are not designed to reduce emissions from Safeguard covered facilities. The Safeguard Mechanism does not currently incentivise facilities to reduce emissions below their baseline level. Since it commenced on 1 July 2016, emissions from Safeguard covered facilities have grown over 4 per cent from 131.3 Mt CO<sub>2</sub>-e in to 136.9 Mt CO<sub>2</sub>-e in 2020-21.<sup>11</sup> Under current policy settings, these aggregate emissions are projected to reach 146 Mt CO<sub>2</sub>-e in 2029-30.

Without a contribution from Safeguard covered facilities, other sectors of the economy would face a disproportionately high burden for Australia to meet its legislated 2030 emissions reduction target. Safeguard facilities would not commence an orderly transition to net zero by 2050 and policy uncertainty (or exemption) would continue to deter investment or create financial risks in the form of a capital risk premium.

The Safeguard reforms will reduce aggregate baselines to achieve its target of no more than 100 Mt CO<sub>2</sub>-e in 2030, and 1,233 Mt CO<sub>2</sub>-e between 2020-21 and 2029-30 in net emissions. The reforms are expected to result in at least 205 Mt of emission reductions between 2023-24 and 2029-30. They will arrest and reverse the growth in covered emissions, position Safeguard facilities to do a proportionate share of the emissions reduction task to 2030, and prepare for net zero by 2050.

The final policy design fulfils the Government's election commitment for the Safeguard Mechanism to:

- reduce baselines predictably and gradually over time;
- provide tailored treatment for EITs, and
- include tradeable credits for companies that stay below their baselines.

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ACCU scheme arrangements are sound. The Government agreed in principle to the recommendations of the Review and will implement them alongside the Safeguard Mechanism reforms.

<sup>10</sup> [Australia's emissions projections 2022 \(dcceew.gov.au\)](https://www.dcceew.gov.au/energy/emissions-projections) provides details of national and sectoral emission trends under current policies, the potential impact of the Safeguard reforms, methods and assumptions.

<sup>11</sup> Safeguard facility emissions are published by the Clean Energy Regulator at: [Safeguard facility reported emissions \(cleanenergyregulator.gov.au\)](https://www.cleanenergyregulator.gov.au/safeguard-facility-reported-emissions)

The legislative framework is in place to reform the Safeguard Mechanism to help industry reduce emissions in line with Australia's climate targets. Businesses are familiar with the scheme. It has been operating since 1 July 2016.

Businesses recognise that an enhanced Safeguard Mechanism will provide policy certainty for large industrial emitters and send clear market signals to drive investments. The reforms will put Safeguard facilities on a pathway to net zero by 2050, backing in the climate commitments that companies have made, and helping meet our legislated national target of a 43 per cent reduction on 2005 levels by 2030.

Reforms to the Safeguard can effectively and efficiently reduce emissions from Safeguard facilities by declining baselines, prevent emissions from 'leaking' overseas by providing appropriate assistance to EITE facilities, and incentivise facilities that have additional abatement opportunities to ensure the emissions reductions are achieved at least cost across the scheme.

An orderly transition to reduce Australia's greenhouse gas emissions will provide benefits for the Australian economy and environment. Increased take up of low emissions technology and abatement opportunities by the industrial sector will allow them to remain internationally competitive in the global shift to net zero. In a decarbonising world, businesses that produce products with a comparatively high emissions intensity may increasingly face tariffs when exporting overseas, and consumers and importers may shift to less emissions-intensive competitors.

## 2. Why is Government action needed?

Businesses are acting to manage their emissions risks, recognising the decarbonisation transition underway. The majority of companies controlling or operating Safeguard facilities have medium and long-term climate targets, including net zero goals, and are factoring Australian and global decarbonisation into their decisions, operations and investments.

However, the scale of voluntary action from Safeguard facilities is varied and insufficient to provide confidence Australia will achieve the emissions reduction task required to 2030 or 2050. Without an overarching requirement that applies equally to all Safeguard facilities, some facilities may not take voluntary action and other facilities or sectors would need to compensate. Relying on voluntary action, from a significant share of Australia's emissions (28 per cent), could jeopardise the achievement of our climate goals. Under existing policy settings, Australia's emissions are projected to be 32 per cent below 2005 levels by 2030 – well short of the legislated target of 43 per cent reductions.<sup>12</sup>

The Australian Government is firmly committed to taking action on climate change. The Government has already demonstrated this commitment by legislating targets to reduce Australia's emissions by 43 per cent below 2005 levels by 2030 and achieving net zero by 2050.

Powering Australia is the Government's plan to reduce emissions and achieve these targets. It spans electricity, industry, agriculture and carbon farming and transport. To boost our renewable energy output, the Government is making a \$20 billion investment to upgrade the electricity grid, ensuring it can handle more renewable energy. Investments in solar banks and community batteries will help more people access solar and maximise the benefits of Australia's rooftop solar transformation. Other commitments include these reforms to the Safeguard Mechanism, grants to support decarbonisation and access to finance to drive uptake of renewables and low emissions technologies. All of these actions will help us reduce our emissions and put us on the pathway to net zero.

Aligning the contribution expected from Safeguard facilities with the national targets through changes to the existing Safeguard Mechanism framework will promote policy certainty and stability. It has been identified by a broad coalition of business leaders and groups as the preferred approach to provide policy certainty for large industrial emitters. The Safeguard reforms, in combination with the Government's target of 82 per cent renewable electricity generation by 2030 and the Rewiring the Nation program, are projected to put Australia on track to 40 per cent below 2005 levels by 2030. It is expected the remaining gap will close as more policies are developed and implemented.<sup>13</sup>

Through reforms to the existing framework, the Government aims to deliver its climate targets in a way that maximises benefits, minimises costs and shares the effort among participants. In delivering the reforms, the Government is guided by the policy principles of being effective, efficient, equitable and simple —the principles set out in the consultation paper as the overarching objective.<sup>14</sup>

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<sup>12</sup> [Australia's emissions projections 2022 \(dcceew.gov.au\)](https://www.dcceew.gov.au/energy/emissions-projections)

<sup>13</sup> [Australia's emissions projections 2022 \(dcceew.gov.au\)](https://www.dcceew.gov.au/energy/emissions-projections)

<sup>14</sup> [Safeguard Mechanism Reforms Consultation paper, page 7](#)

Effective	Equitable	Efficient	Simple
<ul style="list-style-type: none"> <li>• Reduces emissions consistent with Australia's greenhouse gas emissions reduction targets</li> </ul>	<ul style="list-style-type: none"> <li>• Baselines are set on a consistent and transparent basis and achieve an equitable distribution of the costs and benefits</li> </ul>	<ul style="list-style-type: none"> <li>• Allows the market to find the lowest cost abatement wherever it occurs and encourages production where it is least emissions-intensive</li> </ul>	<ul style="list-style-type: none"> <li>• Makes baseline setting arrangements and administrative, and reporting arrangements, as simple and low cost as possible</li> </ul>

**Figure 2 Objectives and policy principles of proposed Safeguard Mechanism Reforms**

Consultation revealed general consensus that the policy design principles are appropriate. These principles have, therefore, informed the analysis and proposed recommendations in response to Question 4 and Question 6 of this Regulatory Impact Analysis.

# 3. What policy options are you considering?

## Overview of policy options

Three policy options have been analysed to fulfil the 2022 election commitment to reform the Safeguard Mechanism. In making the Safeguard Rules, Option 3 is preferred. Options are compared with the reference (business-as-usual) option, reflecting the current policy settings for the Safeguard Mechanism. The main features and points of difference between the options are identified in Table 2.

Table 2 Summary of policy options

Policy option	Policy setting
Reference option (BAU)	<ul style="list-style-type: none"> <li>- The current policy based on the 2 September 2022 compilation of the National Greenhouse and Energy Reporting (Safeguard Mechanism) Rule 2015.</li> <li>- <b>Baselines do not decline</b> and emissions from Safeguard facilities are not reduced consistent with Australia’s 2030 target.</li> <li>- No requirement for EITEs assistance.</li> <li>- No crediting or trading.</li> </ul>
Option 1 (industry average emissions intensities)	<ul style="list-style-type: none"> <li>- Baselines are reset using <b>industry average emissions intensity</b> values.</li> <li>- Baselines decline and emissions from Safeguard facilities are reduced consistent with Australia’s 2030 target.</li> <li>- Best-practice benchmarks applied to new entrants for baseline setting</li> <li>- Tailored EITEs assistance (detailed criteria not defined).</li> <li>- Crediting and trading.</li> </ul>
Option 2 (site-specific emissions intensities)	<ul style="list-style-type: none"> <li>- Baselines are reset using <b>site-specific emissions intensity</b> values.</li> <li>- Baselines decline and emissions from Safeguard facilities are reduced consistent with Australia’s 2030 target.</li> <li>- Best-practice benchmarks applied to new entrants for baseline setting</li> <li>- Tailored EITEs assistance (detailed criteria not defined).</li> <li>- Crediting and trading.</li> </ul>
Option 3 (hybrid that transitions to Option 1 by 2030 and final policy design)	<ul style="list-style-type: none"> <li>- Baselines are reset starting with close to <b>site-specific emissions intensity values, transitioning to industry average emissions intensity values by 2030.</b></li> <li>- Baselines decline and emissions from Safeguard facilities are reduced consistent with Australia’s 2030 target.</li> <li>- International best-practice benchmarks applied to new entrants for baseline setting</li> <li>- Tailored and targeted EITEs assistance (criteria defined).</li> <li>- Crediting and trading.</li> </ul>

As indicated in Table 2, the policy options 1 – 3 are substantively different in the way baselines are initially reset at the start of the reforms (year 2023-24), baseline setting arrangements for new entrants and the definition of



the EITs assistance. Other high-level policy settings are generally consistent across all three options, with greater detail provided in Option 3 reflecting the outcomes of consultation and Government policy decisions.

A comprehensive policy options table is at the end of this question in Table 4. This table provides additional detail on the policy settings and provides the full range of equivalence and differences between options. It also identifies how Option 3 has developed based on consultation to date.

## Policy elements

This part describes the policy elements that are presented in Table 4. More detailed descriptions can be found in the *Safeguard Mechanism Reforms Consultation Paper*<sup>15</sup> and the *Safeguard Mechanism Reforms Position Paper January 2023*.<sup>16</sup> The substantive area of difference between options is the baseline setting for existing facilities. For other elements, there is either equivalence or strong similarity between Options 1 and 2. There are some nuanced areas of difference between Option 3 and Options 1 and 2 as Option 3 takes on stakeholder feedback received since August 2022, whereas Options 1 and 2 are as presented in the August 2022 *Consultation Paper*.

## Safeguard Mechanism emissions target

The Safeguard Mechanism covers facilities with emissions of 100,000 tonnes or more of Scope 1 (direct) CO<sub>2</sub>-e emissions each year. As indicated in the *Powering Australia* plan,<sup>17</sup> this coverage threshold will remain in place under the reformed scheme. There is no change to the emissions coverage threshold and emissions from grid-connected electricity generators will remain uncovered unless the sectoral-baseline for the electricity sector is exceeded.

In the reference case, there is no emissions reduction target for Safeguard covered emissions. Under Options 1-3, Safeguard covered emissions take on a proportional share of the national emissions target. The proportional share is determined based on facilities covered by the Safeguard Mechanism contributing to 28 per cent of national emissions in 2020-21.<sup>18</sup> To adopt a proportional share of the national emissions target, aggregate baselines need to fall to no more than 100 million tonnes CO<sub>2</sub>-e by 2030<sup>19</sup>. This compares with covered emissions of 137 million tonnes CO<sub>2</sub>-e in 2020-21 and projected emissions of 143 million tonnes CO<sub>2</sub>-e in 2023-24. The Safeguard Mechanism's corresponding share of the national emissions budget for the decade is 1,233 million tonnes CO<sub>2</sub>-e.<sup>20</sup> 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.

Using the design parameters of Option 3, 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. The decline rate will apply to existing and new facilities, except where a differential trade-exposed baseline adjusted (TEBA) rate has

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<sup>15</sup> [Safeguard Mechanism reforms – Consultation Paper – Aug 2022](#)

<sup>16</sup> [Safeguard Mechanism reforms – Position Paper – January 2023](#)

<sup>17</sup> [Powering Australia Plan](#)

<sup>18</sup> This does not include grid-connected electricity generation which is subject to a sectoral baseline.

<sup>19</sup> At the time of the January 2023 Position Paper, national emissions were 621.1 million tonnes CO<sub>2</sub>-e in 2005 and must fall to 354 million tonnes CO<sub>2</sub>-e by 2030 if Australia is to meet its international target. In 2020-21 (the most recent year that data was available at the time of the analysis), Safeguard Mechanism facilities contributed 28.14 per cent of national emissions. The corresponding share in 2030 is 100 million tonnes CO<sub>2</sub>-e (28.14 per cent of 354 million tonnes CO<sub>2</sub>-e).

<sup>20</sup> The indicative value of the emissions budget is 4,381 million tonnes CO<sub>2</sub>-e corresponding to the 2030 target. The Safeguard Mechanism's proportional share is 1,233 million tonnes CO<sub>2</sub>-e (28.14 per cent of 4,381).

been approved for a facility. These baseline decline rates have been determined in the context of the policy design settings proposed in the *Safeguard Mechanism Reforms Position Paper January 2023* and following subsequent incorporation of feedback.

Under Option 3, post-2030 decline rates will be predictably set in 5 year blocks, after updates to Australia's Nationally Determined Contribution (NDC) under the Paris Agreement. Decline rates for 2030-31 to 2034-35 will be set by 1 July 2027. Periodic baseline setting would involve consultation and take account of 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 will be set for 2030-31 to 2049-50, noting that the actual rate will be set through the periodic baseline setting process.

## Implementation and evaluation

Under Options 1 and 2, the reforms were proposed to be delivered in two phases. Option 3 does not include a phased delivery but commits to a review of the Safeguard Mechanism in 2026-27 to assess initial reform impacts, and ensure policy settings 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.

Refer to Question 7 for more details on implementation and evaluation.

## Baselines

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. Options 1-3 are based on a production-adjusted baseline framework.

Baselines for existing facilities need to be reset before the reforms can commence to remove aggregate headroom.<sup>21</sup> The Government consulted on two options to remove headroom:

- **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'.

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<sup>21</sup> Aggregate headroom is the gap between aggregate baselines and aggregate emissions. Removing this delivers scarcity (so aggregate baselines equal aggregate emissions) and ensures that declining baselines will result in genuine emission reductions.

The Consultation Paper welcomed views on other options, noting there are many possible approaches. Options 1 and 2 distribute costs differently. Option 1 provides an incentive for production to occur at the least emissions-intensive facilities. Option 2 more evenly distributes costs in the short term, but fails to encourage production to occur where it is least emissions intensive. To balance these strengths and weaknesses, Option 3 was developed – a hybrid model – weighted towards site-specific baselines (Option 2) in the short term, and transitioning to industry-average benchmarks (Option 1) by the end of the decade.

Table 3 defines the ratios of industry average ( $EI_{IA}$ ) and site-specific emissions intensity values ( $EI_{SS}$ ) for Option 3.

**Table 3 Ratio of industry average and site-specific emissions intensity values for Option 3 FY 24 - FY 30**

Year	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
Ratio $EI_{IA}:EI_{SS}$	<b>10:90</b>	<b>20:80</b>	<b>30:70</b>	<b>40:60</b>	<b>60:40</b>	<b>80:20</b>	<b>100:0</b>

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, and the timing and scale of those costs and benefits.

### Setting baselines for new facilities

Under current (pre-reform) settings for the Safeguard Mechanism, baselines for new facilities—those that are first covered under the Safeguard Mechanism after 1 July 2021—were intended to be set using emissions-intensity benchmarks, though the level of these benchmarks has not been set.<sup>22</sup> The August 2022 Consultation Paper considered two options for setting new facility benchmarks—the industry-average (that is, the same as for existing facilities), or best-practice emissions intensity values. For simplicity, Options 1 and 2 are assessed with the assumption that new facilities are put on a best-practice benchmark.

Under Option 3, new facility baselines are based on international best-practice emissions-intensity benchmarks, adapted for Australian circumstances. 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. There is growing global momentum to reach net zero by 2050, with accelerated global efforts to decarbonise through the rapid development and deployment of clean technology. Best-practice benchmarks reflects this dynamic global investment environment, which will have positive spillovers for new Australian facilities in terms of the availability and cost of clean technologies. Adapting international best practice for an Australian context means, for example, adjusting for energy sources or other resources that are used overseas but are not available in Australia.

<sup>22</sup> Under current arrangements, a new entrant is defined as a facility that first triggers the Safeguard Mechanism threshold of 100,000 tonnes CO<sub>2</sub>-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.

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, except where the new product is substantially similar to the existing product.

International best practice will also apply to new oil and gas fields supplying an LNG train. This will provide certainty that all developments that open a new oil and gas field to supply an LNG train will be treated the same with respect to their reservoir carbon dioxide emissions for the purposes of the Safeguard Mechanism.

## Flexible compliance options

In the reference scenario (pre-reform scheme settings), only Australian Carbon Credit Units can be generated and acquitted for compliance purposes. International units are not permitted. Facilities are able to apply for a multi-year monitoring period to take a two- or three-year averaging approach to managing their baseline compliance.

The introduction of a new type of within-scheme credit under the reforms – the Safeguard Mechanism Credit (SMC) – is accompanied by detailed design features.

SMCs will be automatically generated when a facility's emissions are below its baseline. All Safeguard Mechanism facilities can generate credits, except facilities accessing borrowing arrangements and landfills.

Flexible compliance options that are equivalent across Option 1 and Option 2 include:

- banking of SMCs allowed within 2 phases, but not between phases —phase 1 (2023-24 to 2024-25) and phase 2 (2025-26 to 2029-30),
- borrowing to 5 per cent of the baseline each year to 2030, no interest rate and no borrowing beyond 2030.

In response to stakeholder feedback, Option 3 contains several differences:

- unlimited banking of SMCs until 2030,
- borrowing to 10 per cent of the baseline each year to 2030, with a 2 per cent interest rate applied in the year after borrowing occurred for the first two years of the reforms and 10 per cent thereafter,
- borrowing and banking arrangements post-2030 to be reviewed in the Safeguard Mechanism review in 2026-27,
- setting a maximum price of \$75 per tonne of CO<sub>2</sub>-e in 2023-24 as a cost containment measure, increasing with the consumer price index (CPI) plus 2% each year. The 2026-27 review will also consider the cost containment measure arrangements,
- multi-year monitoring periods extended to five years with SMCs permitted to be earned at the end of the extended period.

Across Options 1 – 3, international offsets are not proposed to be part of the initial reforms, but the Government may consider allowing access to high integrity offsets at some time in the future. Given the state of market development and focus on domestic benefits, both for Safeguard facilities and the Australian carbon market, international offsets are not proposed to be a part of the initial enhanced Safeguard Mechanism. As a first step, the Government will consult in 2023 on the possibility of establishing the legislative framework for international units.

## Emissions-intensive, trade-exposed (EITE) designation and assistance

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). The second is a facility-by-facility designation providing tailored treatment for trade-exposed facilities that face material new costs due to the reforms.

A range of assistance measures were consulted on, including funding options from Powering the Regions Fund (PRF), direct provision of SMCs and differentiated baseline decline rates.

Designation and assistance is proposed to be targeted and time-limited. Under Option 3, there will be two categories of facilities that will be eligible to receive assistance to manage competitiveness issues and carbon leakage risks.

- Trade-exposed facilities
  - o Designation will be determined at an activity level.
  - o An indicative trade-exposed activity list was set out in the exposure draft Rule, based on commodities with a trade share higher than ten per cent.
  - o Facilities are considered trade-exposed where the primary production variable of that facility is designated as trade exposed in the Rule.
- Trade-exposed baseline-adjusted (TEBA) facilities
  - o Trade-exposed baseline-adjusted facilities are those that are at a higher risk of carbon leakage. The scheme impacts faced by this category of facilities will be more significant, particularly after the first few years of the scheme and in those industries with limited currently available technology to reduce emissions. They will be assessed under a two-step process:
    - Step 1: Confirm the facility is trade-exposed (as per the trade exposure activity list)
    - Step 2: Determine whether the effect of the reformed scheme on the facility exceeds the relevant cost impact metric. The metric will reflect a facility's cost of compliance for the year, as a share of its margin based on Earnings Before Interest and Tax or EBIT (for manufacturing facilities), or as a share of its revenue (for all other facilities)
    - Designation will apply for a three-year period. Facilities may be reassessed for a new three-year designation each year.

In terms of assistance, trade-exposed facilities will be eligible to access the \$600 million Safeguard Transformation Stream (STS) within the Powering the Regions Fund (PRF). The STS will provide financial support for investments to reduce scope 1 emissions by trade-exposed facilities with the aim of bringing forward investment and technology adoption, lowering regulatory compliance costs, supporting workforce development, and helping Australian industry to gain first mover advantage. The PRF funding will not be available to new or expanding coal or gas facilities.

Trade-exposed baseline-adjusted facilities will be eligible for a differential concessional decline rate that will be set based on scheme impact, with a minimum decline rate of 2 per cent (or 1 per cent for manufacturing facilities). The baseline decline rate "discount" will be applied for three year period, and can apply iteratively depending on how impacted a particular facility is in terms of the cost impact metric. The discount will start applying when the cost impact metric first exceeds 3 per cent of revenue (or 3 per cent of EBIT for manufacturing

facilities) and reach a maximum discount value when the cost impact metric exceeds 8 per cent of revenue (or 10 per cent of EBIT for manufacturing facilities).

## Other assistance

An additional \$400 million stream of the PRF will be set aside to support the sovereign manufacturing capability of critical inputs to the energy transition. This would provide grant funding to support businesses producing steel, cement, lime and aluminium/alumina, which will be covered by the Safeguard Mechanism but are also essential to the development of Australia's clean energy industries.

Safeguard facilities will have preferential access to the remaining PRF funding, and will continue to have access to funding through ARENA. In addition, independently governed investment vehicles – such as the National Reconstruction Fund and the CEFC – are available to support businesses to meet their obligations under the Safeguard Mechanism.

Table 4 Reference scenario and Safeguard Mechanism reform policy options

Policy setting	Safeguard Mechanism – BAU and reform options				Differences between reference scenario and policy options – key points and evolution of Option 3 and final design
	Reference scenario (BAU)	Option 1	Option 2	Option 3	
<b>Safeguard Mechanism emissions target</b>					
Safeguard Mechanism emissions target	No reduction target applies to emissions from Safeguard facilities. An additional 205 Mt are emitted from Safeguard facilities relative to Options 1-3 over 2024 to 2030	Proportional share based on 2020-21 emissions levels (28.14% of national emissions or 100 Mt in 2030)			<ol style="list-style-type: none"> <li>Proportional share of the national target, consistent with the Government’s revised emissions reduction target, the <i>Climate Change Act</i>, Australia’s nationally determined contribution (NDC) for 2030 and commitment to achieve net zero emissions by 2050.</li> <li>Consistent with the <i>Powering Australia</i> plan, which committed to build on the existing Safeguard Mechanism to reduce industrial sector emissions.</li> <li>Proposed reforms build on a legislated framework, in place since 2016, and therefore promote policy certainty and stability.</li> <li>Equitable sectoral share that minimises costs and shares the effort across the economy.</li> <li>As per internal DCCEEW analysis, the reforms will deliver an estimated 205 million tonnes of abatement by 2030.</li> <li>The current mechanism is not fit for purpose for achieving emissions reduction outcomes. It allowed BAU operations and aggregate emissions from Safeguard facilities to grow. It requires reform to deliver on emissions reduction outcomes.</li> </ol>
Baseline decline trajectory	n/a	Linear decline of 4.9% each year (which incorporates a reserve to account for new entrants and uncertainty in production)	<ul style="list-style-type: none"> <li>Linear decline of 4.9% each year, includes a reserve</li> <li>Decline rates for 2030-2035 to be subject of review in 2026-27 following NDC update, and made by 1 July 2027.</li> </ul>		<ol style="list-style-type: none"> <li>Existing and new facilities will be subject to an annual decline rate, and therefore limit their exposure to increased capital risk premiums and measures such as a carbon border adjustment mechanism (CBAM).</li> <li>To ensure compliance, Safeguard businesses will invest in low-emissions technologies and/or other compliance options (SMC/ACCU purchase).</li> <li>Review proposed in 2026-27 in Option 3, which presents an opportunity to reassess baseline decline rates, to align better with emissions reduction targets (point target and emissions budget).</li> </ol>
<b>Implementation and evaluation</b>					
Reform delivery	n/a	<ul style="list-style-type: none"> <li>Phase 1 (2 years from FY 24 to FY 25) transition commencing 1 July 2023</li> <li>Phase 2 (5 years from FY 26 to FY 30) changes commence in full on 1 July 2025</li> </ul>	<ul style="list-style-type: none"> <li>Policy settings review in 2026-27</li> <li>Periodic baseline setting review every 5 y commencing in 2026-27</li> </ul>		<ol style="list-style-type: none"> <li>Under Option 1 and Option 2, the reforms were proposed to be delivered in a phased manner, with Phase 1 allowing the Government to work with facilities to smooth out operational issues if needed.</li> <li>Some Safeguard businesses expressed concerns around the timing of the reforms and 1 July 2023 start date.</li> <li>Option 3 addresses concerns raised by Safeguard businesses by introducing a review of the initial policy settings in 2026-27, to assess the initial reform impacts, and to ensure policy settings 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. Internal assessment found that a phased approach (as suggested in the Consultation Paper) is not required as proposed policy settings remove headroom and baselines decline from 2023-2024.</li> <li>Under all reform Options (1-3), existing/new entrant Safeguard businesses will incur costs to prepare for the reforms and train personnel for meeting and operationalising compliance requirements for baseline declines, flexible compliance options, and EITE designation.</li> </ol>
<b>Baselines</b>					
Baselines for existing facilities	Site-specific and industry average EI	Industry average EI	Site-specific EI	Hybrid approach	<ol style="list-style-type: none"> <li>Options 1 offers more transparency compared to Option 2 as benchmark emissions intensity values are published in the Safeguard Rule, and holds facilities producing the same outputs to a common standard. Under Option 2, facility specific emissions intensity values could be commercially sensitive, reducing transparency of the baseline setting process.</li> <li>Consistent with the primary objective of reducing emissions, Option 1 encourages least emissions intensive production, and rewards investment in low emissions resources or technologies, and past actions to reduce emissions. On the other hand, Option 1 will disproportionately affect high emitters who will face significant upfront costs with little time to prepare and adjust.</li> </ol>

					<p>16. Option 2 would not reward least emissions intensive facilities. It may also disadvantage facilities who have already invested in low emissions production, and who may find it relatively more difficult to reduce emissions compared to more emission intensive competitors.</p> <p>17. Option 2 is cognisant of differences within industries related to location and technologies of facilities, and individual facility circumstances. Option 2 will keep initial costs (exceedances) and benefits (credits) low.</p> <p>18. Option 3 balances the strengths and weaknesses of Options 1 and 2 by implementing a hybrid model weighted towards site-specific baselines (Option 2) in the short term, and transitioning to industry average benchmarks (Option 1) by the end of the decade.</p> <p>19. Option 3 delivers the medium to long term benefits of a standardised approach, while giving businesses sufficient time to prepare.</p> <p>20. Option 3 resolves legacy issues stemming from optionality (between site-specific and industry-average emissions intensity) in existing arrangements.</p> <p>21. Under Option 2 and Option 3 site-specific emissions intensity values will need to be determined for all facilities that currently use published industry average values, and reset existing site-specific emissions intensity values to ensure they are set on a consistent basis.</p> <p>22. Under Options 2 and 3, facilities must apply for site-specific emissions-intensity values by 30 April 2024. The application must be accompanied by an audit. This cost will be borne by Safeguard facilities.</p> <p>23. Option 3 increases complexity and administrative costs by combining site-specific and industry-average.</p> <p>24. Option 3 will make baseline settings simpler and fairer, by mandating (i) production adjusted baselines for FY24 (ii) use of Government defined production variables and (iii) all production variables be production adjusted.</p>
Setting baselines for new entrants	EI benchmarks (not operational)	Best practice EI, noting that feedback was also sought on industry average EI	<ul style="list-style-type: none"> <li>- International best practice, adapted for an Australian context</li> <li>- International best-practice will extend to existing Safeguard facilities that invest in new plant and equipment resulting in the use of a new production variable, unless it is substantially similar.</li> <li>- International best-practice will extend to new oil and gas fields supplying an LNG train.</li> </ul>	<p>25. Under current arrangements, new entrant baselines should be set using emissions intensity benchmarks, however, the level of benchmarks has not been set yet.</p> <p>26. Under Options (1-3), benchmark emissions intensity values will apply to all new entrants.</p> <p>27. For Options 1 and Option 2, the consultation paper proposed the top 10% best practice of Australian industry as the benchmark.</p> <p>28. Through the reform process, under all reform options (1-3), best practice benchmarks will avoid locking in long-lived assets that are emissions-intensive. The making of best practice benchmarks will demonstrate Australia's strong commitment to meet its decarbonisation targets and encourage efficient investment.</p> <p>29. Under Option 3, international best practice (adapted to an Australian context) will apply for new entrants as well as to existing Safeguard facilities that invest in new plant and equipment resulting in the use of a new production variable, which will encourage world's best practice emissions performance in design.</p> <p>30. Where a facility produces a new production variable on an existing production variable, an amended site-specific emissions intensity value will be considered. If the new production variable is substantially similar, the facility could use the emissions intensity determination for the previous production variable. In addition, international best practice is extended to the reservoir carbon dioxide emissions from new oil and gas fields that supply an LNG facility.</p>	
<b>Flexible compliance options</b>					
Crediting and trading	n/a	Permitted		<p>31. The SMC market introduces an additional source of flexibility by allowing facilities to generate tradeable credits specific to the Safeguard Mechanism when their emissions fall below their baseline. This incentivises and rewards facilities that undertake additional abatement and allows businesses another method to manage compliance costs as baselines decline.</p> <p>32. The Clean Energy Regulator will automatically issue SMCs to facilities with emissions below their Safeguard Mechanism baseline. The CER will incur administrative costs to issue SMC credits, as well as for ongoing monitoring and audit requirements.</p> <p>33. Facilities that have been covered by the Safeguard Mechanism for at least three years that fall below the coverage threshold will be able to opt-in to receive credits for up to 10 years, noting that their baselines will continue to decline, retaining incentives to pursue further abatement and not wind-back any actions.</p>	
Intertemporal flexibility – banking and borrowing	n/a	Banking within but not between phases (see timing and process for reform delivery)	<ul style="list-style-type: none"> <li>- Unlimited banking of SMCs to 2030.</li> <li>- Borrowing up to 10 per cent each year to 2030 with a 2 per cent interest rate applied in the following year for</li> </ul>	<p>34. Banking provisions promote price stability, as prices then reflect present supply and demand as well as expectations of future supply and demand.</p> <p>35. Under Options 1 and 2, with a phased approach for banking, limited banking could encourage liquidity of the SMC market.</p> <p>36. Under Options 1 and 2, with banking not permitted between phases, SMC prices could potentially become unstable at the end of the phase. SMC price uncertainty could increase risks and financing costs associated with</p>	



			<ul style="list-style-type: none"> <li>the first two years and 10 per cent thereafter.</li> <li>- The Government will consider banking and borrowing arrangement post-2030 in the 2026-27 review.</li> </ul>	<p>investment in abatement opportunities Under Option 3, it is proposed to allow unlimited banking to 2030, with the 2026/26 review to consider post-2030 arrangements.</p> <p>37. It is proposed that facilities be permitted to borrow up to ten per cent of their current baseline, and face a two per cent interest rate for the first two years and 10 per cent thereafter. Borrowing provisions will be considered in the 2026-27 Safeguard Mechanism review.</p>
Domestic offsets: ACCUs	Permitted	Permitted with enhanced transparency on ACCU and SMC issuance, use and holdings		<p>38. Under all options, including BAU, access to domestic offsets (ACCUs) will remain unchanged</p> <p>39. Under Option 3, the Clean Energy Regulator will publish the number and type of ACCUs and SMCs surrendered by a facility, including the method type for any ACCUS. Facilities that surrender ACCUs equivalent to 30 per cent or more of their baselines will need to submit a statement on why more on-site abatement has not been undertaken.</p>
Intertemporal flexibility – multi-year monitoring period (MYMP)	2-3 year MYMP permitted	Restricted access to MYMP for a 5 year period MYMP provisions not to be extended beyond 2030	<ul style="list-style-type: none"> <li>- Restricted access to MYMP for a 5 year period on a facility based assessment</li> <li>- Extension of MYMP provisions beyond 2030 will be subject to review in 2026-27, and may potentially be restricted after 2030.</li> </ul>	<p>40. In the reference scenario, MYMP provisions provide all facilities with time to implement emissions reduction projects, acquire ACCUs or manage year-on-year fluctuations in emissions. MYMP provisions could result in risks to achieving the 2030 target because the current arrangements could potentially allow a significant number of facilities to delay reductions in their net emissions until after 2030. This risk to achieving the 2030 target will also apply to Options 1 and 2.</p> <p>41. Under reform scenarios (Options 1-3), extended MYMP arrangements could be established by application on a facility-by-facility basis, be based on an assessment of available and emerging technologies, and where facilities reasonably anticipate emissions reduction during the extended period. MYMP provisions will be afforded to facilities where a facility does not have reasonably available technological options to avoid the initial exceedance and reasonably anticipates to reduce its emissions within this period.</p> <p>42. Under Options 1-3, applicant facilities will need to provide a statement, signed by the responsible financial officer stating that the facility is reasonably likely to avoid an exceedance at the end of the relevant period. Facilities will need to be able to demonstrate to the Clean Energy Regulator that they have a plan in place and a credible basis for providing a statement that the facility is unlikely to be in exceedance at the end of the period.</p> <p>43. Options 1-3 allow for MYMP provisions to be more targeted at facilities that have limited near-term abatement opportunities, and where the permitted multi-year compliance period will enable Safeguard facilities to match available and emerging technologies.</p> <p>44. A review phase will allow for a stocktake, and assessment of potential risks for meeting Australia’s emissions reduction targets.</p>
Price containment measure	n/a	n/a	Price containment measure in place, to be reviewed in 2026-27	<p>45. Facilities have expressed concerns around ACCU market supply constraints, which could lead to potential price and availability risks.</p> <p>46. To address this, under Option 3, a price containment measure will be implemented to prevent excessive prices, where a facility can purchase fixed price ACCUs from the Government to meet scheme compliance obligations.</p>
<b>EITEs designation and assistance and broader assistance to non-EITE facilities</b>				
EITE designation	n/a	<ul style="list-style-type: none"> <li>- Time-limited EITE designation</li> <li>- An adapted RET test for trade exposure and emissions intensity as related to cost intensity.</li> </ul>	<ul style="list-style-type: none"> <li>- Two categories of EITE – <i>Trade-exposed industries</i> determined at an activity level &amp; <i>trade-exposed baseline-adjusted facilities</i> facing concentrated scheme impacts</li> <li>- Time limited EITE designation (3 years)</li> </ul>	<p>47. Under reform options (1-3), EITE designation will be based on comparative impact. There will be two categories of facilities that will have access to tailored treatment to manage competitiveness and carbon leakage risks. Trade-exposed facilities will include all facilities undertaking a trade-exposed activity and trade-exposed baseline-adjusted facilities will include those facilities facing concentrated scheme impacts.</p> <p>48. Under Reform Options (1-3), the EITE designation will be time bound, and will be based on either trade exposure and cost impact threshold for facilities facing concentrated impacts.</p> <p>49. Trade-exposed baseline-adjusted facilities will incur administrative costs to apply for relevant designation and for an independent audit report for providing assurance over information in the application, including the revenue and EBIT values and confirm that all eligibility criteria have been met.</p> <p>50. The CER will incur costs to assess trade-exposed baseline-adjusted applications.</p>
EITE – assistance measures	n/a	<ul style="list-style-type: none"> <li>- Potential options including financial assistance to meet Safeguard obligations. Potential assistance from the PRF and NRF, in addition to existing sources of funding and finance.</li> <li>- Direct provision of SMCs to EITEs</li> <li>- Differentiated baseline decline rates</li> </ul>	<ul style="list-style-type: none"> <li>- Preferential grant funding for trade exposed industries through the Safeguard Transformation Stream (through the PRF)</li> <li>- Trade-exposed baseline-adjusted facilities facing concentrated impacts</li> </ul>	<p>51. A range of assistance measures were consulted on, including funding options from the NRF and PRF, direct provision of SMCs and differentiated baseline decline rates.</p> <p>52. A two-step process has been proposed for EITE assistance. Safeguard facilities that satisfy the trade exposure test (only) will have preferential access to the Safeguard Transformation Stream within the PRF’s broader decarbonisation fund for hard-to-abate sectors. Trade-exposed baseline-adjusted facilities that satisfy the trade exposure test as well as concentrated impact test will also be eligible for a concessional baseline decline rate that will be set based on scheme impact, with a minimum annual decline rate of 2% (or 1% for manufacturing facilities).</p> <p>53. EITE facilities will incur administrative costs to apply for grant funding.</p>

			eligible for a concessional decline rate in addition to grant funding above.	
Non-EITE financial assistance	n/a	-	Competitive grants and concessional finance options through a variety of sources, including other programs under the Powering the Regions Fund, the National Reconstruction Fund, ARENA and the CEFC.	54. Addresses non-EITE facility concerns around the need for funding and attractive financing in order to conduct significant emissions reductions projects, particularly for hard-to-abate activities where the required technology may not be commercially viable for several years.

# 4. What is the likely net benefit of each option?

## Impact analysis

The following qualitative analysis provides a description of direct net benefits expected to Safeguard facilities and the community and how they could be realised through the introduction of the reforms. These benefits are broadly the same across all three options analysed, due to the same overall objectives of the reforms.

Challenges in quantifying direct costs and benefits arise from difficulty in isolating and attributing the impacts of specific policies relative to other drivers of abatement activity, including corporate climate commitments and shifts in global capital markets. There is currently limited information on facility decision making, abatement costs and intentions regarding onsite emissions reductions and the use of flexibility mechanisms. Greater information is expected to become available through enhanced transparency measures introduced through the reforms. Consequently, the impacts other than the regulatory burden estimate of administrative compliance costs have not been able to be quantified.

The analysis of qualitative impacts captures the nature of the expected impact – whether positive or negative – arising from the different policy options. The qualitative impact analysis of Table 6 sets out the primary impacts of the different policy settings across the reference and policy options. It refers to Table 4 and identifies relevant key points that accrue positive/negative impacts, as relevant to the particular policy setting. Wherever relevant, key points as listed in Table 4 are cross referenced to impacts, as applicable to reference and policy options, in each cell (shown as numbered references). For each impact, the table classifies the type and materiality of the impact. Further materiality of the impact is categorised as ‘low’, ‘medium’ and ‘high’, depending on the relative scale of contribution to the overall benefits and costs. Where a listed negative impact is applicable to a particular reform option, the relevant cell is shaded orange, and where a listed positive impact is applicable to a particular reform option, the relevant cell is shaded green.

The following benefits listed in Table 6 are difficult to quantify due to challenges in completing an economic analysis of the benefits of the Safeguard reforms relative to an estimated counterfactual of no reforms.

- Policy certainty provided by parallel legislative changes aligned with the *Climate Change Act*
- Reduced capital risk premium for Safeguard businesses and avoidance or reduction of import penalties imposed by trade partners
- Potential for green premiums to be applied to low or zero emissions intensity products
- Domestic carbon market growth, including associated benefits for regional employment, biodiversity, cultural heritage, and First Nations.

Benefits such as a reduced capital risk premium or reduction of import penalties would require regional or global macroeconomic modelling of investment flow and trade flows. Such modelling is generally highly aggregated, and not well suited to identifying changes to one part of Australian industry from changes to one aspect of Australia’s domestic policy. Methods to quantify the benefits from resolving policy uncertainty are not well developed. Further, the benefits to the domestic carbon market include social benefits, such as the preservation or

enhancement of cultural heritage, which are difficult to quantify. As a result, the following detailed qualitative analysis is provided for these benefits.

## Policy certainty

Together with Australia's *Climate Change Act 2022*, the Safeguard Mechanism reforms will provide Safeguard facilities and investors with policy certainty of the Government's plan to use the Safeguard Mechanism to transition Australia's biggest industrial emitters to net zero by 2050. The Business Council of Australia noted in its submission to the Position Paper that:

*It is important to remember that even though business are committed to a net zero emissions future, they still face short term competitive pressures in both products and capital markets. An enhanced Safeguard Mechanism (as proposed) is needed to increase investor confidence, and guide investments towards a net zero emissions future by provide appropriate support and reducing the uncertainty industrial businesses face as they transition.*

Business Council of Australia

These sentiments are supported by the Investor Group on Climate Change who noted in relation to reducing regulatory risk to investments in Australia in their submission:

*The overall policy framework sets declining baselines to net zero by 2050. This is critical to investor confidence in long-term policy settings.*

IGCC

Given the majority of Safeguard facilities are owned by corporations with net zero commitments, a higher level of emissions reductions than estimated could eventuate in the absence of the reforms, however the exact level is uncertain given the negative impacts of a lack of clear policy framework.

## Competitiveness, trade and cost of borrowing

As a stable, credible domestic policy to reduce industrial emissions, the Safeguard Mechanism reforms:

- will improve certainty for competitiveness of Australian businesses by providing a clear framework to support their transition to net zero,
- could reduce the risk of Australian exports being subject to penalties imposed by export partners to address carbon leakage, such as through carbon border adjustment mechanisms; and
- could reduce the risk of capital risk premiums, whereby Australian businesses face increased capital or finance costs in an environment where global financial institutions and decision makers are taking coordinated steps to align investment with the transition to net zero.<sup>23</sup>

## Green premiums

A reduction in the emissions intensity of production (or services delivered) driven by the Safeguard Mechanism reforms could see Safeguard facilities benefit from a green premium within their pricing. A green premium is the

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<sup>23</sup> Research from the Brookings Institution explored the performance of 'green' and 'brown' stocks looking for evidence of a capital risk premium affecting the performance of brown stocks. Green stocks were found to outperform brown in the US and most G7 nations since 2012. Available at: [https://www.brookings.edu/wp-content/uploads/2023/01/WP83-Bauer-et-al\\_1.12.23.pdf](https://www.brookings.edu/wp-content/uploads/2023/01/WP83-Bauer-et-al_1.12.23.pdf)

additional amount a customer is willing to pay for near-zero or net zero emissions intensive production. Internationally, markets and pricing structures are evolving with growing consumer demand for low-carbon products. Platts reports both a low-carbon and zero-carbon aluminium price above the London Metals Exchange cash price, both of which exhibited strong growth in 2022.<sup>24</sup> Australian miners have reported their intentions to reduce their emissions intensity in order to offer a premium product and apply a green premium.<sup>25</sup>

## Domestic carbon market co-benefits

The reforms are expected to have positive economic, social, cultural and environmental benefits for the domestic carbon market. The Independent Review of Australian Carbon Credit Units<sup>26</sup> heard that ACCUs have co-benefits which provide additional value for ACCUs:

- Economic: carbon revenue streams create a more robust and sustainable business model for rural and remote landholders. Enhanced cash flow enables landholders to invest and make improvements on their properties leading to improved environmental condition and increases in productivity.
- Social: Financial viability (from diversification of revenue streams) encourages younger generations to return to rural and remote living and increases on country job opportunities. In some instances, community stakeholders mentioned increased local co-ordination and knowledge sharing between landholders on agricultural productivity and with First Nations on land management practices.
- Environmental: better management of feral animals, rehabilitation and protection of key habitat leading to an increase in diversity and distribution of native species. For savanna burning projects - reduced late season wildfire.
- Cultural: intergenerational transfer of cultural knowledge; reconnection with Country; growing community recognition and interest in cultural land management practices; and increased autonomy to make decisions aligned with cultural responsibilities to care for Country.

## Environmental benefits

Under the reference case with no reforms, emissions from Safeguard covered facilities (new and existing) are projected to reach 146 Mt CO<sub>2</sub>-e in 2030. This is in contrast to net emissions with the reforms, which are projected to be no more than 100 Mt CO<sub>2</sub>-e in 2030<sup>27</sup>. The difference between the emissions pathway without the reforms and with the reforms is a total of 205 Mt CO<sub>2</sub>-e over 2023-24 to 2029-30. Under all three policy options, net baselines are designed to follow the same trajectory and the same additional emissions avoidance is being driven by the policy. The direct environmental benefits are therefore related to avoided emissions of 205 Mt CO<sub>2</sub>-e.

The social cost of carbon (SCC) is a metric that monetises the economic impacts of changes in climate from the release of each additional tonne of greenhouse gas emissions. SCCs are determined using integrated assessment models which aim to comprehensively capture climate damages on biological systems and physical infrastructure. The SCC is prominently used in policy development and evaluation in the United States. Ranges of SCC used by

<sup>24</sup> <https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/metals/080522-lcap-climbs-higher-on-growing-popularity-for-low-carbon-aluminum>

<sup>25</sup> <https://www.afr.com/policy/energy-and-climate/commodities-turn-to-net-zero-for-green-premium-20220927-p5bl7z#:~:text=Gold%20miner%20Bellevue%20Gold%20is,play%20a%20%E2%80%9Cgreen%20premium%E2%80%9D>.

<sup>26</sup> Final Report of the Independent Review of Australian Carbon Credit Units, December 2022, accessed at: <https://www.dceew.gov.au/sites/default/files/documents/independent-review-accu-final-report.pdf>

<sup>27</sup> To achieve the Safeguard Mechanism's share of the national emissions budget to 2030, the baseline trajectory must reduce to 95 Mt in 2030. This fulfils the Safeguard Mechanism's share of the national point target in 2030 of 100 Mt CO<sub>2</sub>-e.

the US – noting their active work to incorporate recent scientific advances – start from the current US SCC of between US\$51/t in 2020\$ in 2020 to US\$190/t in 2020\$ in 2020<sup>28</sup>.

## Secondary costs and benefits

The positive impact from the policy certainty created by the reforms can be expected to indirectly benefit other Australian business not covered by the Safeguard Mechanism. Placing Australia’s largest industrial emitters on a regulated pathway to net zero will make Australia’s business environment more attractive to investors and innovators backing low emissions technologies and clean energy. Safeguard facilities will be looking for products and services that align with their obligations under the reforms and their corporate climate goals. This could benefit small to medium emitters not covered by the Safeguard, as well as financial institutions, that are able to offer decarbonisation solutions to Safeguard facilities.

The reforms may also, by demonstrating Australia’s commitment to contributing to global climate action, reduce the risk that exports from non-Safeguard covered be subject to import tariffs or carbon border adjustments imposed by our trade partners.

The reforms have been carefully designed to moderate and mitigate cost impacts to Safeguard facilities and to mitigate cost pass through to other businesses and the community. Refer to Question 3 for a description of how the flexible compliance options, tailored TEBA rates and funding and financial assistance have been designed to moderate and mitigate cost impacts.

Any potential cost pass through from Safeguard facilities to consumers should be measured against a reference case where negative climate change impacts are more frequent and severe. These events disrupt supply chains, impact productivity and increase insurance costs for businesses and consumers. For example, in the October 2022 Budget, fruit and vegetable prices were estimated to be around 8 per cent higher than what they would have otherwise been as a result of flooding events at the time. Food prices were forecast to contribute 1½ percentage points to inflation through the year to the December quarter 2022. The October floods specifically were expected to add an additional 0.1 percentage points to inflation in the December quarter 2022 and again in the March quarter 2023.

## Regulatory burden estimate

Regulatory costs have been assessed qualitatively and quantitatively.

Administrative costs are estimated at Table 5 and relate to labour costs for Safeguard facilities to become familiar with the reforms, new application processes, including emissions intensity determinations, TEBA determinations and MYMP determinations, and time spent monitoring and managing a facility’s compliance position through crediting and trading. Administrative labour costs are also expected to arise from developing and carrying out on-site abatement projects, which are expected to occur more broadly and significantly than prior to the reforms. These costs will be partially offset by regulatory benefits from streamlining baseline setting so that all baselines are production-adjusting and use prescribed production variables, with fixed (calculated and reported) baselines removed. The different baseline setting approaches are expected to result in comparatively minor variations in

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<sup>28</sup> The US EPA published the SCC value of \$51 in 2020\$ USD in February 2021 with a 3 per cent discount rate, refer Table ES-1 [https://www.whitehouse.gov/wp-content/uploads/2021/02/TechnicalSupportDocument\\_SocialCostofCarbonMethaneNitrousOxide.pdf](https://www.whitehouse.gov/wp-content/uploads/2021/02/TechnicalSupportDocument_SocialCostofCarbonMethaneNitrousOxide.pdf). The US EPA is currently consulting on updated SCC values, with their proposed central value being revised upwards to \$190 in 2020\$ in September 2022 using a 2 per cent discount rate, see Table 4. [https://www.epa.gov/system/files/documents/2022-11/epa\\_scghg\\_report\\_draft\\_0.pdf](https://www.epa.gov/system/files/documents/2022-11/epa_scghg_report_draft_0.pdf).

administrative cost estimates across the three options, with an overall minor impact on businesses relative to expected annual margin. Under Option 1, a small number of facilities that are currently not using prescribed production variables would need to apply for an emissions intensity determination using prescribed production variables and default (industry average) emissions intensities. Under Options 2 and 3, all facilities would need to apply to the Clean Energy Regulator for an emissions intensity determination based on site specific data. Option 3 introduces slightly more administrative burden over Option 2, as under the hybrid model, facilities are required to apply for site-specific emissions intensities and use the prescribed production variables required in Option 1. At an average facility level, the average annual regulatory costs translate to a range between around \$17, 000 for Option 1 to \$21, 000 for Option 3.

**Table 5 Regulatory burden estimate, \$2023 Australian dollars**

Average annual regulatory costs (from business as usual)				
Change in costs (\$ million)	Business	Community organisations	Individuals	Total change in costs
Option 1	3.7	\$0	\$0	3.7
Option 2	4.4	\$0	\$0	4.4
Option 3	4.5	\$0	\$0	4.5

Costs estimated over the period of the reforms (2023-24 to 2029-30) and the preparatory year; 2022-23

Substantive compliance costs have been estimated qualitatively due to the high degree of uncertainty in the range of possible outcomes in terms of facility decision making (refer Box 1), the evolution and costs of decarbonisation technologies, and the cost of domestic offsets. Substantive compliance costs relate to the cost of managing excess emissions; the difference between a facility’s gross emissions and their baseline. A facility’s net emissions must not exceed their baseline. Companies will take different approaches to managing their Safeguard Mechanism obligations and their climate risk. The total substantive compliance costs are estimated to be the same across all three options at a low impact on Safeguard businesses relative to expected annual margin. Total substantive costs are estimated to be the same across all three options due to the same overall emissions objectives of the reforms. Compliance costs are expected to be more evenly distributed between facilities under Option 3 relative to Options 1 and 2 (Table 7). Option 1 would disproportionately impact facilities with an emissions intensity above the industry average. Option 2 would distribute compliance costs evenly among facilities but would not recognise past performance and would not incentivise lower emissions-intensive production. At an individual facility level the designation of facilities as TEBA based on cost impact will moderate individual cost impacts above a set threshold. Risks of extreme price outcomes for ACCUs are addressed through a cost containment mechanism.

Safeguard facilities will have flexible compliance options and will have mitigation opportunities both above and below the prevailing cost of domestic offsets (ACCUs) and SMCs. While there is uncertainty regarding the evolution of technologies for on-site abatement activities and their costs, substantial opportunities for on-site emission reductions are expected at costs below the prevailing ACCU prices. The pace of technological innovation and associated cost reductions has historically been underestimated. An example of this is the consistent under-projection of solar panel growth and deployment (and over-estimation of future costs) in most energy-systems modelling forecasts that extrapolate historical experience curves. Businesses’ investment strategies to managing carbon risk will also be based on a broad range of factors, with cost only one consideration for managing their climate risk (Box 1).

The Safeguard reforms are likely to boost the energy productivity of industrial energy use. Australia’s economic and emissions data show a consistent improvement in emissions intensity for the mining and manufacturing sectors (the two largest sectors covered by the Safeguard Mechanism reforms, which contribute almost 93 per

cent of Safeguard emissions) over the period since 1990. This period spans a range of economic and policy environments. A historical emissions intensity improvement rate of 1.4 per cent was observed for these emissions over 1990 to 2020, with a 10 year high of 2.5 per cent.<sup>29</sup> This assessment shows that even under changing policy and economic environments, incremental efficiency improvements have been consistently observed. Incremental efficiency improvements can represent a range of different activities, such as capital renewal, replacement of minor equipment for more energy-efficient versions, and process optimisation.

The Safeguard Mechanism reforms are likely to incentivise Safeguard facilities to increase their efforts to adopt incremental improvements. External analysis finds that Australian industry could reduce emissions by 10 Mt CO<sub>2</sub>-e a year by implementing additional energy efficiency measures and switching from gas to other clean energy sources.<sup>30</sup> The IEA's 2022 World Energy Outlook (WEO) estimates primary energy intensity will improve 2.4 per cent each year over the period to 2030 under its Stated Policies Scenarios (or STEPS, which incorporates policies governments have actually put in place to achieve net zero targets and objectives), 3 per cent under its Announced Pledges Scenario (APS), and 4 per cent under its Net Zero Emissions by 2050 Scenario (NZE).<sup>31</sup>

Under all three options, the overall annual average regulatory burden is estimated to be a moderately higher impact on businesses relative to business as usual.

#### **Box 1. Non-financial factors influencing Safeguard facilities' decision-making**

There are a range of factors, beyond an assessment of the least-cost option, which will influence facilities' decision-making in the context of the Safeguard Mechanism reforms. These factors could contribute to a prioritisation of on-site emissions reductions over using offsets or credits, even where the latter is a lower-cost option.

Around 80 per cent of facilities, accounting for over 86 per cent of scheme emissions, are covered by corporate commitments to net zero. There is also a growing shareholder expectation and social license consideration for companies to operate within Australia's legislated framework to net zero by 2050. Emerging climate risk disclosure frameworks will reinforce this trend.

A third of publicly listed companies that own Safeguard facilities use an internal carbon price for investment decisions, with half using prices of more than \$100 a tonne.

## **Net benefit analysis**

To identify the preferred option, net benefits have been assessed based on the qualitative analysis framework (refer Table 7 ) which uses the overarching objectives and policy principles set out in the consultation paper.

<sup>29</sup> ABS (2022) 5206.0 Australian National Accounts: National Income, Expenditure and Product, Table 6, AGEIS (2022) National Greenhouse Gas Inventory Quarterly updates

<sup>30</sup> CEFC (2018), *Australian manufacturing gas efficiency guide*, available at: <https://www.cefc.com.au/media/401962/australian-manufacturing-gas-efficiency-guide.pdf>

<sup>31</sup> IEA (2022), *World Energy Outlook 2022*, available at: <https://www.iea.org/reports/world-energy-outlook-2022>



Table 6 BAU and Safeguard reform options – qualitative impact analysis

Policy setting	Negative				Positive									
	Description	Type	Materiality	Applicable to			Description	Type	Materiality	Applicable to				
				Reference Scenario BAU	Option 1	Option 2				Option 3	Reference Scenario BAU	Option 1	Option 2	Option 3
				Numbered references correspond to key points in Table 44						Numbered references correspond to key points in Table 4				
Overall reforms legislative package							Policy certainty provided by parallel legislative changes aligned with Climate Change Act and net zero by 2050	Economic and regulatory	High		1,5	1,5	1,5	
Baseline decline trajectory and net emission reductions	Cost to Safeguard businesses for meeting declining baselines, including capital costs for deploying low-carbon technologies and/or ACCU/SMC purchase and surrender	Economic	Medium	1, 6, 7, 8	1, 6, 7, 8	1, 6, 7, 8	Reduced capital risk premium for Safeguard businesses	Economic	Low		7	7	7	
							Potential for green premiums to be applied to low or zero emissions intensity products	Economic	Low		7, 8, 31, 51, 52, 54	7, 8, 31, 51, 52, 54	7, 8, 31, 51, 52, 54	
							Avoidance or reduction of import penalties imposed by trade partners	Economic	Low		1, 7, 8	1, 7, 8	1, 7, 8	
Implementation and evaluation						Appropriate calibration of policy settings through a review in 2026-27	Economic	Medium		10-11	10-11	12		
Baselines for existing facilities						Hybrid option allows businesses to manage transition by giving sufficient time to prepare to manage the lumpy nature of abatement technology deployment while delivering on the benchmark approach in the medium to long term	Economic	High				18-20, 24		
Baselines for new entrants and significant expansions	Potential increased capital cost to some new entrant businesses for setting up facilities that meet best-practice benchmarks	Economic	Medium	25	29-30	29-30	29-30	Avoids locking in investment in emissions-intensive long-life assets, reduces competitive distortions between new and existing facilities, and reduces the potential opportunities for gaming facility definitions under NGERs.	Economic	High		26-28	26-28	29-30
Flexible compliance options - SMC crediting and trading							Improved flexibility for compliance obligations through availability/liquidity of offsets with SMC trade, fungibility of ACCUs, allowing businesses to	Economic	High		31, 33	31, 33	31, 33	

Policy setting	Negative						Positive							
	Description	Type	Materiality	Applicable to			Description	Type	Materiality	Applicable to				
				Reference Scenario BAU	Option 1	Option 2				Option 3	Reference Scenario BAU	Option 1	Option 2	Option 3
				Numbered references correspond to key points in Table 44						Numbered references correspond to key points in Table 4				
							manage compliance costs and lower abatement cost							
Flexible compliance options – allowance of domestic offsets							Domestic carbon market growth: regional employment, biodiversity, cultural heritage, First Nations	Economic, social	High		8, 38	8, 38	8, 38	
Flexible compliance options - intertemporal flexibility - banking and borrowing provisions	Potential risk of instability in the SMC market if banking only permitted within phases and not between, which could increase financing cost of investment in abatement technologies	Economic	High		36	36	36	Improved price stability through banking provisions	Economic	High		34	34	34
	Risk to 2030 target if borrowing is allowed in 2029-2030	Environmental	High		34	34	34							
Flexible compliance options - Requirement to report ACCU unit holdings							Improved transparency in the ACCU market	Economic	High		39	39	39	
Flexible compliance options - extended and targeted multi-year monitoring period							Improved inter-temporal flexibility and reduced direct costs afforded by extended multi-year monitoring periods	Economic	High		41-43	41-43	41-43	
Flexible compliance option - Price containment measure	Risks in ACCU market supply constraints with speculation and uncertainty on price and availability	Economic	Medium		45	45		Improved flexibility and reduced direct costs for compliance through implementation of cost containment measures	Economic	Medium				46

Table 7 Safeguard Mechanism reforms - Net benefit analysis

<b>Legend</b> [text] – Positive outcome [text] – Negative outcome	Option 1	Option 2	Option 3
<b>Performance against overarching principles (relative to reference scenario )</b>			
<b>Effective - reduces emissions consistent with Australia's greenhouse gas emissions reduction targets.</b>	<ul style="list-style-type: none"> <li>- Aggregate emissions reduction outcomes same across all reform options</li> <li>- Inclusion of an emissions 'reserve' mitigates the risk of overshooting the point and emissions budget targets</li> <li>- Proportional target maintains the importance of a strong investment signal, and a clear decarbonisation trajectory to net zero by 2050.</li> <li>- Placing new entrant facilities on the best-practice benchmarks sends a strong signal to investors, indicating Australia's strong commitment to emissions reduction, ensures closer alignment with emissions reduction trajectories and limits risks of overshooting targets</li> </ul>	<ul style="list-style-type: none"> <li>- Aggregate emissions reduction outcomes same across all reform options</li> <li>- Inclusion of an emissions 'reserve' mitigates the risk of overshooting the point and emissions budget targets</li> <li>- Proportional target maintains the importance of a strong investment signal, and a clear decarbonisation trajectory to net zero by 2050.</li> <li>- Placing new entrant facilities on the best-practice benchmarks sends a strong signal to investors, indicating Australia's strong commitment to emissions reduction, ensures closer alignment with emissions reduction trajectories and limits risks of overshooting targets</li> </ul>	<ul style="list-style-type: none"> <li>- Aggregate emissions reduction outcomes same across all reform options</li> <li>- Applying a uniform, annual decline rate of 4.9 per cent maintains policy position that this rate will transition industry to net zero and allow the Safeguard to meet its proportional share of the target.</li> <li>- Proportional target maintains the importance of a strong investment signal, and a clear decarbonisation trajectory to net zero by 2050.</li> <li>- Inclusion of an emissions 'reserve' mitigates the risk of overshooting the point and emissions budget targets.</li> <li>- Recognises that new investments have the opportunity to use the latest technology and build world's best-practice emissions performance in design. By subjecting new entrant/significant expansion facilities to international best-practice benchmarks (adapted to Australian context), this option sends a strong signal to investors, indicating Australia's strong commitment to emissions reduction, ensures closer alignment with emissions reduction trajectories and limits risks to overshooting targets.</li> <li>- This option allows for recalibration of policy settings through a scheduled review as well as a periodic baseline setting process, to stay aligned with Australia's future NDC updates and Australia's climate targets.</li> </ul>
	<b>Improvement</b>	<b>Improvement</b>	<b>Significant improvement</b>
<b>Equitable - baselines are set on a consistent and transparent basis and achieve an equitable distribution of the costs and benefits.</b>	<ul style="list-style-type: none"> <li>- Option 1 offers transparency as industry average emissions intensity values are published in the Safeguard Rule, and holds facilities producing the same outputs to a common standard.</li> <li>- <b>Option 1 will disproportionately affect high emitters who will face upfront costs from scheme commencement</b></li> </ul>	<ul style="list-style-type: none"> <li>- By using site-specific emissions intensity values, Option 2 is cognisant of differences within industries related to location and technologies of facilities, and individual facility circumstances, and therefore distributes costs more equitably between Safeguard facilities in the short-term.</li> <li>- <b>Under Option 2, site-specific emissions intensity values could be commercially sensitive, reducing transparency of the baseline setting process.</b></li> </ul>	<ul style="list-style-type: none"> <li>- Shares effort equitably by phasing compliance costs.</li> <li>- Subjecting all new investments, including at existing Safeguard facilities to international best-practice benchmarks reduces competitive distortions between new and existing facilities and limits opportunities for gaming facility definitions under NGERs.</li> <li>- Periodic review will enhance transparency around targets and emissions outcomes and allow for appropriate recalibration.</li> <li>- Application of strict eligibility requirements for EITE designation minimises scheme impacts on non-Safeguard facilities while maintaining clear long-term incentives for reducing all emissions.</li> <li>- While trade-exposed baseline-adjusted facilities will be afforded the concessional baseline decline rate (assessed on a facility level assessment), by requiring EITE facilities continue to have a baseline decline maintains appropriate abatement incentives and distributes the costs across EITE and non-EITE facilities, and minimises scheme impacts on all facilities.</li> <li>- Enhances transparency by mandating production adjusted baselines for all facilities at commencement of reforms, and requiring all facilities to use Government defined production variables. The periodic review process will also enhance transparency on baseline decline settings.</li> </ul>
	<b>Improvement</b>	<b>Improvement</b>	<b>Significant improvement</b>

<b>Legend</b> [text] – Positive outcome [text] – Negative outcome	Option 1	Option 2	Option 3
<b>Performance against overarching principles (relative to reference scenario )</b>			
<b>Efficient allows the market to find the lowest cost abatement wherever it occurs, and encourages production where it is least emissions-intensive.</b>	<ul style="list-style-type: none"> <li>- Option 1 encourages least emissions intensive production, and rewards investment in low emissions resources or technologies and past actions to reduce emissions and helps protect carbon leakage overseas</li> <li>- Flexible compliance options will deliver emissions reductions at lowest cost and reduce the overall costs to the economy – while delivering the required level of emission reductions</li> <li>- Retaining the production adjusted framework supports economic growth while delivering emissions reduction.</li> <li>- <b>Moving all facilities to industry-average benchmarks would impose relatively high compliance costs on some facilities from scheme commencement.</b></li> </ul>	<ul style="list-style-type: none"> <li>- Flexible compliance options will deliver emissions reductions at lowest cost and reduce the overall costs to the economy – while delivering the required level of emission reductions.</li> <li>- Retaining the production adjusted framework supports economic growth while delivering emissions reduction.</li> <li>- <b>Option 2 would not reward least emissions intensive facilities. It may also disadvantage facilities who have already invested in low emissions production, and who may find it relatively more difficult to reduce emissions compared to more emissions intensive competitors.</b></li> </ul>	<ul style="list-style-type: none"> <li>- Option 3 balances stakeholder views on baseline setting by offering a hybrid of options proposed in the consultation paper.</li> <li>- Maintains efficient policy settings in the long-term by phasing in compliance costs.</li> <li>- Introduces costs and benefits in manageable increments while allowing businesses sufficient time to plan and implement emissions reduction projects.</li> <li>- Flexible compliance options will deliver emissions reductions at lowest cost and reduce the overall costs to the economy – while delivering the required level of emission reductions.</li> <li>- Permitting full banking and generous borrowing will promote price stability.</li> <li>- Extended but targeted flexible compliance arrangement through MYMP option will allow facilities baseline trajectory to match available and emerging technologies.</li> <li>- Proposed cost containment measure will give businesses certainty about maximum compliance costs.</li> <li>- Retaining the production adjusted framework supports economic growth while delivering emissions reduction.</li> <li>- By requiring EITE facilities continue to have a baseline decline creates strong market signals for investment.</li> </ul>
	<b>Significant improvement</b>	<b>Improvement</b>	<b>Significant improvement</b>
<b>Simple - makes baseline setting arrangements, and administrative and reporting arrangements, as simple and low cost as possible.</b>	<ul style="list-style-type: none"> <li>- Provides stability and makes implementation simple by retaining the production adjusted baseline framework, and application of industry average emissions intensity framework from scheme commencement</li> </ul>	<ul style="list-style-type: none"> <li>- Provides stability and makes implementation simple by retaining the production adjusted baseline framework.</li> <li>- <b>Requires development of all site-specific emissions intensity values- increasing the regulatory burden under Option 2.</b></li> </ul>	<ul style="list-style-type: none"> <li>- Provides stability and makes implementation simple by building on a legislated framework and retaining the production adjusted baseline framework.</li> <li>- Mandating government defined PVs and production adjusted baselines simplifies administrative arrangements.</li> <li>- <b>Requires development of site-specific emissions intensity values for all facilities, development of international best-practice benchmarks, development and operationalisation of the SMC market, implementation of banking and borrowing arrangements, ongoing auditing and monitoring, facility level assessments of EITE designation applications – all increasing the regulatory burden under Option 3.</b></li> </ul>
	<b>Mixed</b>	<b>Lower</b>	<b>Lower</b>
<b>Net benefit relative to status quo</b>	<b>Improvement</b>	<b>Improvement</b>	<b>Significant Improvement</b>

# 5. Who did you consult and how did you incorporate their feedback?

## Consultation to date

The Department of Climate Change, Energy, the Environment and Water has been consulting extensively on the best approach to reform the Safeguard Mechanism. Consultation has been undertaken broadly with affected facilities, industry bodies, government agencies, non-Safeguard industrial businesses, carbon market participants, environmental groups and other interested parties.

An outline of consultation activities is provided below.

### Direct engagement

In addition to the formal public consultation processes outlined below, the Department held over 170 meetings with interested stakeholders from June 2022 to April 2023. The Department also hosted an inter-departmental committee on a regular basis with Commonwealth agencies and a forum with state and territory governments to discuss reform progress and interlinkages with other policies.

### Initial consultation paper

Stakeholders were invited to respond to a consultation paper, released on 20 August 2022. The consultation paper sought feedback on matters including the Safeguard Mechanism's share of the national abatement task, how Safeguard Mechanism baselines are set, crediting and trading, the role of domestic offsets and international units, treatment of emissions-intensive trade-exposed businesses, taking account of available and emerging technologies, and indicative baseline decline rates.

On Safeguard Mechanism baselines, the consultation paper sought feedback on whether baselines should be production-adjusted or be fixed as production changes. The paper raised the issue of 'headroom', where aggregate baselines currently exceed aggregate emissions covered by the Safeguard Mechanism. The paper sought feedback on possible approaches for setting baselines for existing facilities so that aggregate headroom can be removed, and on approaches for setting baselines for new entrants.

A public online information session was held on 31 August to outline the key elements of the consultation paper, and a recording was made available on the Department's website shortly afterwards. Approximately 220 people registered for the webinar.

The Department held five in-person roundtables; in Brisbane on 2 September, in Melbourne on 6 September, in Adelaide on 8 September, in Perth on 13 September and in Sydney on 16 September. Invites were sent to stakeholders in Safeguard covered sectors, including transport, resources, aviation, minerals and cement; government agencies; consultancies; carbon market advisories; environmental non-government organisations;

think tanks and academia; financial services; industry groups; unions and First Nations groups. Roundtables were attended by approximately 140 people.

Submissions were open on this consultation until 20 September 2022. The Department granted extensions until 23 September 2022 to all stakeholders who requested one. Around 240 submissions were received. All non-confidential submissions were published on the Department's website.

Stakeholders were generally supportive of the Government's reforms, recognising the need to meet Australia's emissions reduction targets of 43 per cent by 2030. However, feedback was mixed in response to each design element, reflecting the operating environment of each facility, or the interests of stakeholders.

The feedback was actively considered in developing the draft bill and final policy positions, as outlined below. Please also refer to Table 4 which steps out policy settings for Options 1 and 2 (as proposed in the consultation paper) as well the evolution of Option 3 based on stakeholder feedback.

- Safeguard facilities will deliver a proportional share of the national target.
- The existing production-adjusted (intensity) baseline framework will be retained to decouple economic and emissions growth. It will also protect against carbon leakage overseas by ensuring baselines cannot be met by reducing production.
- A hybrid approach to setting baselines balances the long-term goal of Option 1 of incentivising low-emissions production, while minimising cost impacts on higher emissions-intensive producers. This approach would see baselines to be weighted towards site-specific, before transitioning to industry average benchmarks by 2030.
- New facilities will have baselines set at international best practice, recognising their opportunity to use the latest technology and build this into their design.
- Safeguard Mechanism Credits (SMC) will be available from 1 July 2023 to encourage reduction of baselines. Trading of credits to facilities with emissions above their baseline will be allowed.
- Banking and borrowing arrangement will be allowed to provide flexibility around the timing of abatement activities. Full banking will be allowed to 2030 and borrowing up to 10 per cent each year. A two per cent interest rate will be applied to borrowing in the first two years, changing to a 10 per cent interest rate thereafter to prevent it being used unless genuinely needed.
- Facilities will be unable to register new ERF projects to reduce covered emissions. However, they can still register projects which do not relate to covered emissions, such as land sector projects and projects that reduce electricity use.
- Existing ERF projects that are already registered will be allowed to continue to generate and sell credits, but will not be able to enter into new contracts or extend their crediting period. 'Double counting' provisions will be retained to prevent the abatement being counted twice.
- Existing ERF contracts will remain in place, with 'deemed surrender' provisions to be grandfathered for two years. This will allow existing contracts to be able to continue to sell the abatement to the Government for the contract duration, but only count the abatement towards their baseline for the first two years.
- Multi-year monitoring periods will only be made available, on a facility-by-facility bases by application, to allow baseline trajectories to match available and emerging technologies.

- Concerns about price risks in the ACCU market revealed during consultation, will see the introduction of a cost containment measure to provide certainty about maximum compliance costs.
- Treatment of EITEs will be based on the principle of comparative risk, to ensure that businesses are not competitively disadvantaged and that emissions do not 'leak' overseas. Assistance will be provided for all trade-exposed facilities, using a sector-based assessment, in addition to all trade-exposed baseline-adjusted facilities which have a concentrated risk of carbon leakage, based on a facility-specific assessment.
- Facilities assessed to be trade-exposed baseline-adjusted facilities will be able to apply for lower baseline decline rates, which reflect the specific impacts faced and will be locked in for 3 years.
- Funding of \$600 million will be made available through the Powering the Regions Fund (PRF) to support both categories, with preferential access for Safeguard facilities to other funding through the PRF.
- An additional \$400 million stream of the PRF will be set aside to support the sovereign manufacturing capability of critical inputs to the energy transition.
- Stakeholders expressed a preference for a carbon border adjustment mechanism to manage trade competitiveness. The Government will undertake a formal review of such an approach, in response to this feedback.
- Baselines will decline in a predictable and gradual way from 1 July 2023, at 4.9 per cent each year to 2030. This will apply to both new and existing facilities, unless a differential EITE rate has been approved.
- Post-2030 decline rates will be set in 5 year blocks, after updates to Australia's Nationally Determined Contribution.
- A review of the policy settings will be conducted in 2026-27 to ensure they are appropriately calibrated.

## Draft Bill consultation

On 10 October 2022, exposure draft legislation was released for public comment. Whilst the main elements of the reformed scheme are contained within subordinate legislation (see Further Consultation), some changes to primary legislation were required to create the architecture for the reforms.

The *Safeguard Mechanism Reforms (Crediting) Amendment Bill 2022* outlined proposed changes to allow for the creation of Safeguard Mechanism Credits. The *Carbon Credits (Carbon Farming Initiative) Amendment (Safeguard Facility Eligibility Requirements) Rules 2022* clarified the requirements for eligible offset projects relating to covered emissions at Safeguard facilities.

Submissions were open until 28 October 2022. The Department granted extensions until 1 November 2022. Over 50 submissions were received. All non-confidential submissions were published on the Department's website.

It was communicated in the Explanatory Document released as part of the consultation package, that additional elements would be consulted later in the year as part of proposed amendments to the Safeguard Rule.

Safeguard facilities were generally supportive of SMCs. A consistent theme through submissions was to include further detail on how trading would operate and the scope of SMCs to ensure integrity.

Some Safeguard covered facilities opposed changes to prevent the registration for new ACCU projects and to prevent participation in future auctions, arguing that financial decisions may have been made previously on the

assumption that an investment would generate ACCUs. Some submissions suggested that facilities should be able to choose between generating ACCUs or SMCs. Other stakeholders support these changes.

Some stakeholders proposed additional amendments through the Bill, such as including a new object in the Act to specify the emissions reduction objective and to ensure that the Safeguard Rule is consistent with the updated object.

Some stakeholders expressed concern that the majority of the reforms would be contained within the Safeguard Rule, which is a determination made by the Minister. This is consistent with the current approach to the Safeguard Mechanism, and is a disallowable instrument.

The *Safeguard Mechanism (Crediting) Amendment Bill 2022* was introduced to Parliament on 30 November 2022. It was referred to the Senate Environment and Communications Legislation Committee on 1 December 2022. The Committee received submissions and held public hearings, with a report tabled on 6 March 2023.

The Bill passed both houses on 30 March 2023. The final Bill included amendments that reflected stakeholder concerns raised during the release of the position paper.

## Position Paper and subordinate legislation

The Government released a Position Paper on 10 January 2023 on the proposed design of the reforms and supporting exposure draft legislation.

The position paper outlined the proposed design of the reforms, including the share of the national emissions reduction target that Safeguard facilities will deliver; the framework for setting baselines for existing and new facilities, including the rate of decline; arrangements for issuing and using Safeguard Mechanism Credits; access to flexible compliance options, including access to credits, offsets, banking and borrowing arrangements, multi-year monitoring periods and a cost containment measure; and tailored treatment for emissions-intensive, trade-exposed facilities.

Draft subordinate legislation was also released, that will give effect to the policy positions proposed in the paper. This included *National Greenhouse and Energy Reporting (Safeguard Mechanism) Amendment (Reforms) Rules 2023*, *Carbon Credits (Carbon Farming Initiative) Amendment (No. 2) Rules 2023*, *Australian National Registry of Emissions Units Rules 2023* and *Safeguard Mechanism Legislation Amendment (2023 Measures No 1) Regulations 2023*.

A public online information session was held on 19 January 2023 to outline the key elements of the consultation paper, and a recording was made available on the Department's website shortly afterwards. Approximately 790 people registered for the webinar, with approximately 640 joining the session.

The Department held three in-person roundtables; in Melbourne on 24 January, in Brisbane on 31 January, and in Perth on 2 February. The purpose of these roundtables was to provide a forum for discussion with directly affected or highly interested stakeholders. Invites were sent to stakeholders in Safeguard covered sectors, including transport, resources, aviation, minerals and cement; government agencies; consultancies; carbon market advisories; environmental non-government organisations; think tanks and academia; financial services; industry groups; unions and First Nations groups. Roundtables were attended by approximately 140 people.

Submissions were open on this consultation until 24 February 2023. The Department granted extensions until 28 February to all stakeholders who requested one. Over 280 submissions were received. All non-confidential submissions were published on the Department's website.



Stakeholders were broadly supportive of the policy certainty that the reforms would provide as industry transitions to net zero.

Stakeholders in the manufacturing sector requested additional support, through an alternative metric to access TEBA status and additional funding through the Powering the Regions fund. They perceived the proposed policy settings would not recognise their operating environments and may negatively impact on their competitiveness.

Environmental groups and others raised concerns about the use of offsets under the reforms, and called for increased transparency in how facilities were reducing emissions and their use of offsets.

Stakeholders expressed concern about the treatment of new entrants, with industry calling for more leniency and environmental groups calling for stricter treatment.

Stakeholders from across all groups continued to show strong stakeholder interest and support a review into policy options to address carbon leakage. The government will commence a review to explore additional policy options to prevent carbon leakage. The review will consider an Australian CBAM as one of the potential responses to carbon leakage which could complement the Safeguard Mechanism reforms.

The final policy design reflects feedback received through stakeholder consultation and a final suite of changes to strengthen the scheme, which primarily focuses on three outcomes:

- Recognising the importance of the manufacturing sector in the transition to a net zero economy by providing further flexibility and support for strategic industries.
- Providing greater certainty that the scheme will deliver on its emissions objective by enhancing its transparency and accountability mechanisms, including:
  - Amendments to the NGER Act to ensure that the policy intent of the reforms to drive down emissions from Australia's large industrial sector is achieved. The Objects of the Act now clarify specific net emission targets, that gross emissions should reduce over time, that Safeguard facilities should have a material incentive to reduce their on-site emissions, and the competitiveness of trade-exposed industries is appropriate supported.
  - Introducing specific reporting on progress against the scheme's emissions targets and a requirement for the Minister to take action, if necessary, in response, including consideration of the effect of new entrants and expansions on scheme objectives.
  - Introducing increased transparency and accountability on facilities' emissions and compliance activities.

## Ongoing consultation during implementation

One-on-one meetings will continue to be held with interested stakeholders to discuss the implementation of the reforms. The Department will continue to engage with other agencies at the federal and state level to ensure the reforms are coordinated with other policy reforms that are underway.

Refer to **Error! Reference source not found.** for a list of stakeholders that submitted non-confidential submissions.

# 6. What is the best option from those you have considered?

Assessment of the preferred option has taken into consideration qualitative impact analysis (Table 6), the regulatory burden estimate (Table 5) and the overarching policy principles for the Safeguard Mechanism reforms (Figure 2).

The regulatory impact analysis finds Option 3 as the preferred option (Table 7)

Policy setting	Negative				Positive								
	Description	Type	Materiality	Applicable to			Description	Type	Materiality	Applicable to			
				Reference Scenario BAU	Option 1	Option 2				Option 3	Reference Scenario BAU	Option 1	Option 2
Numbered references correspond to key points in Table 44							Numbered references correspond to key points in Table 4						
Overall reforms legislative package							Policy certainty provided by parallel legislative changes aligned with Climate Change Act and net zero by 2050	Economic and regulatory	High		1,5	1,5	1,5
Baseline decline trajectory and net emission reductions	Cost to Safe guard businesses for meeting declining basel	Economic	Medium				Reduced capital risk premium for Safeguard businesses	Economic	Low		7	7	7
							Potential for green premiums to be applied to low or zero emissions intensity products	Economic	Low		7, 8, 31, 51, 52, 54	7, 8, 31, 51, 52, 54	7, 8, 31, 51, 52, 54

Policy setting	Negative					Positive													
	Description	Type	Materiality	Applicable to			Description	Type	Materiality	Applicable to									
				Reference Scenario BAU	Option 1	Option 2				Option 3	Reference Scenario BAU	Option 1	Option 2	Option 3					
				Numbered references correspond to key points in Table 44							Numbered references correspond to key points in Table 4								
	ines, including capital costs for deploying low-carbon technologies and/or ACCU/S MC purchase and surrender																		
						1, 6, 7, 8	1, 6, 7, 8	1, 6, 7, 8											
Implementation and evaluation									Appropriate calibration of policy settings through a review in 2026-27	Economic	Medium				10-11	10-11	12		

Policy setting	Negative						Positive							
	Description	Type	Materiality	Applicable to			Description	Type	Materiality	Applicable to				
				Reference Scenario BAU	Option 1	Option 2				Option 3	Reference Scenario BAU	Option 1	Option 2	Option 3
Numbered references correspond to key points in Table 44				Numbered references correspond to key points in Table 4										
Baselines for existing facilities							Hybrid option allows businesses to manage transition by giving sufficient time to prepare to manage the lumpy nature of abatement technology deployment while delivering on the benchmark approach in the medium to long term	Economic	High				18-20, 24	
Baselines for new entrants and significant expansions	Potential increased capital cost to some new entrants for setting up facilities that meet best-	Economic	Medium		29-30	29-30	Avoids locking in investment in emissions-intensive long-life assets, reduces competitive distortions between new and existing facilities, and reduces the potential opportunities for gaming facility	Economic	High			26-28	26-28	29-30

Policy setting	Negative					Positive									
	Description	Type	Materiality	Applicable to			Description	Type	Materiality	Applicable to					
				Reference Scenario BAU	Option 1	Option 2				Option 3	Reference Scenario BAU	Option 1	Option 2	Option 3	
				Numbered references correspond to key points in Table 44							Numbered references correspond to key points in Table 4				
	practic e benchmarks						definitions under NGERs.								
Flexib le compl iance optio ns - SMC credit ing and tradin g							Improved flexibility for compliance obligations through availability/li quidity of offsets with SMC trade, fungibility of ACCUs, allowing businesses to manage compliance costs and lower abatement cost	Econo mic	Hig h				31, 33	31, 33	31, 33
Flexib le compl iance optio ns – allow ance of dome stic offset s							Domestic carbon market growth: regional employment, biodiversity, cultural heritage, First Nations	Econo mic, social	Hig h				8, 38	8, 38	8, 38

Policy setting	Negative						Positive								
	Description	Type	Materiality	Applicable to			Description	Type	Materiality	Applicable to					
				Reference Scenario BAU	Option 1	Option 2				Option 3	Reference Scenario BAU	Option 1	Option 2	Option 3	
				Numbered references correspond to key points in Table 44							Numbered references correspond to key points in Table 4				
<b>Flexible compliance options - intertemporal flexibility - banking and borrowing provisions</b>	Potential risk of instability in the SMC market if banking only permitted within phases and not between, which could increase financing cost of investment in abatement technologies	Economic	High		36	36	36						34	34	34
	Risk to 2030 target if borrowing is allowed in	Environmental	High		34	34	34								

Policy setting	Negative						Positive							
	Description	Type	Materiality	Applicable to			Description	Type	Materiality	Applicable to				
				Reference Scenario BAU	Option 1	Option 2				Option 3	Reference Scenario BAU	Option 1	Option 2	Option 3
				Numbered references correspond to key points in Table 44						Numbered references correspond to key points in Table 4				
	2029-2030													
Flexible compliance options - Requirement to report ACCU unit holdings						Improved transparency in the ACCU market	Economic	High			39	39	39	
Flexible compliance options - extended and targeted multi-year monitoring period						Improved inter-temporal flexibility and reduced direct costs afforded by extended multi-year monitoring periods	Economic	High			41-43	41-43	41-43	
Flexible compliance option - Price	Risks in ACCU market supply constraints	Economic	Medium			Improved flexibility and reduced direct costs for compliance through	Economic	Medium					46	

Policy setting	Negative					Positive													
	Description	Type	Materiality	Applicable to			Description	Type	Materiality	Applicable to									
				Reference Scenario BAU	Option 1	Option 2				Option 3	Reference Scenario BAU	Option 1	Option 2	Option 3					
				Numbered references correspond to key points in Table 44							Numbered references correspond to key points in Table 4								
containment measure	with speculation and uncertainty on price and availability																		

Table 7 ) as it best balances the overarching objectives and policy principles, is estimated to deliver a significant improvement on outcomes relative to the status quo and addresses concerns raised by stakeholders in consultations undertaken to date by:

- building on a legislated framework that businesses already comply with.
- providing stability by retaining the production adjusting baseline framework, and preventing carbon leakage, supporting business competitiveness, and addressing risks to reliably meeting 2030 target by including an emissions reserve that will apply equitably to all Safeguard Mechanism facilities.
- addressing feedback from Safeguard businesses on baseline setting for existing facilities as well as legacy issues stemming from optionality in existing arrangements.
  - reforming the policy design to deliver a hybrid approach that ensures efficient long-term policy settings, maintains a strong investment signal, allows opportunities for Safeguard businesses to access abatement opportunities while introducing obligations in manageable increments, and encourages production to occur where it is least emissions intensive.
  - limiting excessive initial/short-term costs via the hybrid approach to meet declining baselines that will be concentrated for some facilities under Option 1, while still retaining overall policy objective of supporting emissions reduction outcomes and making low emitters more cost-competitive.
  - recognising that the additional regulatory burden is more than offset by the benefits of the approach.



- recognising that there would be risks of applying less stringent industry average benchmarks to new investments which would lock-in long lived assets, noting new facilities could operate for decades, making net zero harder to achieve. The preferred option of international best-practice benchmarks meets the objective of the reforms while reducing competitive distortion, and aligns Safeguard reform settings with the emissions reduction required for meeting Australia’s 2050 commitment.
  - extending best-practice benchmarks to existing Safeguard facilities that invest in new plant and equipment resulting in the use of a new production variable reduces competitive distortions between existing and new facilities while limiting opportunities for gaming facility definitions under NGERs.
  - extending best-practice benchmarks to new oil and gas fields supplying an LNG train. This will provide certainty that all developments that open a new oil and gas field to supply an LNG train will be treated the same with respect to their reservoir carbon dioxide emissions for the purposes of the Safeguard Mechanism.
- recognising strong stakeholder support for flexible compliance options that achieve lowest cost abatement by introducing flexible yet targeted compliance arrangements that improve scheme efficiency, and help reduce facility compliance costs without jeopardising scheme effectiveness.
  - recognising the risks from allowing banking and borrowing beyond 2030 to meeting emissions reduction commitments to 2030 and carrying forward low-cost SMCs to the next decade if initial policy settings are not calibrated correctly, respectively. Option 3 promotes price stability while calibrating baseline decline to meet the target of no more than 100 million tonnes CO<sub>2</sub>-e in 2030.
- addressing Safeguard businesses’ concerns around:
  - excessive price risks from ACCU market instability and calls for a cost containment measure by introducing a cost containment measure that will be set at \$75 per tonne of CO<sub>2</sub>-e in 2023-24, indexed to the Consumer Price Index (CPI) plus 2 per cent over time.
  - limited abatement opportunities for some Safeguard sub-sectors by granting a targeted 5-year multi-year monitoring period (MYMP) arrangement that will allow those businesses to smooth out abatement trajectories to average out an exceedance in an initial year(s) with below baseline emissions in later years, after a facility has implemented an abatement project.
  - restricted eligibility for the preferred MYMP option only to those that can be under the five year declining baseline, and therefore reduces the risk of MYMP being used to defer liability. The preferred option also allows for a review for further recalibration.
- proposing tailored and targeted treatment to EITE facilities to manage competitiveness and carbon leakage risks.
  - assessing the RET criteria as unsuitable as it is based on data that is 15-20 years old, and includes the cost of scope 2 emissions which are not covered by the Safeguard Mechanism.
  - introducing transparency by reassessing the trade-exposure of activities.
  - proposing targeted financial assistance and concessional decline rates (determined on cost impact threshold) for facilities facing concentrated impacts, thereby reducing competition concerns while still maintaining appropriate abatement incentives and ensuring that all facilities are contributing to Australia’s emission reduction targets.

- In recognition of particular circumstances of manufacturing sector structures, applying a TEBA test based on EBIT with assistance commencing at 3 per cent cost impact and the minimum baseline decline rate of 1 per cent being available when the cost impact is 10 per cent.
- undertaking a review to explore policy options to prevent carbon leakage. The review will consider an Australian CBAM as one of the potential responses to carbon leakage which could complement the Safeguard Mechanism reforms.
- addressing non-EITE industry concerns around the need for funding and attractive financing for deploying significant emissions reduction projects (particularly in hard-to-abate sectors with technologies that aren't commercially viable) by proposing financial assistance be extended to non-EITE designation facilities through preferential access to the Powering the Regions Fund, (as well as potential access to the National Reconstruction Fund, ARENA and the CEFC).
- setting a uniform annual decline rate of 4.9 per cent each year for meeting the Safeguard's share of the national emissions budget and the 2030 point target, which includes the production-adjusted framework, an emissions reserve for new entrants and production uncertainty, the outlook from the draft 2022 emissions projections and an EITEs concessional decline rate for some facilities.
- maintaining the policy position that the decline rate will transition industry to net zero by 2050 while allowing the Safeguard to meet its proportional share of the target, while having the decline rate within the 3.5 to 6 per cent range as flagged in the consultation paper.
  - allowing all post-2030 decline rates to 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.
- proposing a review of the Safeguard Mechanism in 2026-27—once two years of data are available—to ensure policy settings are appropriately calibrated and ensuring that reformed settings are operating as intended, including the first five-yearly reviews of the specific rate of baseline decline, with five-yearly reviews of the NGERs Act continuing to be undertaken by the CCA.

During consultation there was broad support of the proposed design, with stakeholders identifying the hybrid baseline setting as being the best option for meeting the need of the reforms. The National Environmental Law Association supported the hybrid model in their submission to the Position Paper:

*This transitional approach, which recognises the inherent variability of large emitting facility's emissions profiles, ensures that costs for business will be introduced incrementally, and businesses will have adequate time to implement decarbonization methods and technologies. The hybrid model delivers the long-term benefits of industry average baselines, while making the SM manageable for all facilities by giving businesses more time to prepare for the changes. This design will allow the balancing of baseline compliance, investing in at-point decarbonisation, and allowing sufficient flexibility so that compliance obligations can be managed by facilities over time.*

NELA

The Carbon Market Institute and the Energy Efficiency Council highlighted that the hybrid baseline option would be equitable and effective:

*CMI supports the proposed hybrid approach to baseline setting as an elegant solution that balances the competing circumstances of different facilities through the transition from site-specific values to industry average benchmarks.*

CMI

*The proposed transition from site-specific to industry-average baselines is equitable, and will assist in making low-emitting businesses more competitive.*

EFC

PwC further expressed their endorsement of the hybrid model as a proficient balancing the needs of affected businesses:

*Resetting the baseline methodology for existing Safeguard facilities will have an overall positive effect. We acknowledge that the intended impact of this is to remove the headroom that currently exists to encourage prompt direct emissions reductions. As the proposed future model is a “hybrid” system of both industry averages and site-specific emissions intensity values, we agree that the current proposed sliding-scale timeline to 2030 provides adequate time for affected businesses to prepare to transition from site-specific values to industry average.*

PwC

Public submissions to the Position Paper are available at: <https://consult.dcceew.gov.au/safeguard-mechanism-reform-consult-on-design>

# 7. How will you implement and evaluate your chosen option?

## Baseline setting

The existing production-adjusted (intensity) baseline setting framework will be retained. In the first compliance year under the reforms; 2023-24, all facilities must be on production-adjusted baselines—reported, calculated and fixed baselines will no longer be available and all facilities must use published, Government-determined production variables.

To deliver this, in consultation with Safeguard businesses, the Government will:

- 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.

The intention is for this work to be finalised before 1 July 2023.

## Setting baselines for new facilities

New facility baselines will be based on international best-practice emissions-intensity benchmarks, adapted for Australian circumstances. International best-practice will apply to all new investments, including at existing Safeguard Mechanism facilities that start producing a new product.

New entrant arrangements will commence from 1 July 2023, consistent with broader Safeguard reforms. New facility baselines will be subject to an annual decline rate, consistent with baselines for existing facilities.

DCCEEW intends to consult on a framework to establishing international best-practice emissions-intensity benchmarks by 1 July 2023 and develop and consult on the first set of benchmarks during the 2023 calendar year.

## Implementation post 1 July 2023

Once the reforms commence on 1 July 2023, there may be some policy implementation which is finalised within the first compliance year, and other areas which require ongoing monitoring and consultation. Stakeholder consultation and ongoing functions of DCCEEW and the Clean Energy Regulator to maintain the smooth operation of the scheme will continue. Regulatory changes will be necessary, for example making international best practice benchmark emissions intensity values. These processes are outlined below and reflected in the proposed schedule in Table 8.

## Setting baselines for existing facilities

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

## Calculating site-specific emissions intensity values

All existing facilities' site-specific emissions-intensity values will be reset using historic data. Facilities must apply for site-specific emissions-intensity values by 30 April 2024. The application must be accompanied by an audit, except for components of applications that have already been audited for the purposes of an NGERs report. The values will be calculated using the middle two values from the four most recent years of data. The remaining two years of data will be used to calculate a production-weighted, average emissions-intensity value(s) for the facility, noting that any emissions apportioning must be consistent with published production variable definitions.

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

There will be two categories of facilities that will receive tailored treatment to manage competitiveness issues and carbon leakage risks. 'Trade-exposed' facilities will include all facilities undertaking a trade-exposed activity, and 'trade-exposed baseline-adjusted' facilities will include those facilities with an elevated risk of carbon leakage:

- Trade-exposed facilities will be eligible for preferential access to the \$600 million Safeguard Transformation Stream—a component of the Powering the Regions Fund (PRF).
- An additional \$400 million stream of the PRF will be set aside to support the sovereign manufacturing capability of critical inputs to the energy transition.
- Trade-exposed baseline-adjusted facilities will 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 will be one per cent each year for manufacturing facilities and two per cent each year for non-manufacturing facilities.
- Costs will be determined by reference to the default certificate price that will be published in June each year.

### Preventing carbon leakage

The Government sees the potential merits of exploring options to reduce carbon leakage from Australia and will undertake a review to commence in 2023 to explore options.

### Baseline decline rates

In general, a uniform 4.9 per cent decline rate will apply to Safeguard Mechanism baselines each year to 2029-30. This will ensure the Safeguard emissions budget of 1,233 million tonnes CO<sub>2</sub>-e and 2030 target of 100 million tonnes CO<sub>2</sub>-e will be met.

- Decline rates for 2030-31 to 2034-35 will be the subject of consultation in 2026-27 following Australia's NDC update in 2025, and made by 1 July 2027.
- To maintain progress to net zero by 2050, indicative annual decline rates will be set for 2030-31 to 2049-50, noting that the actual rate will be set through the periodic baseline setting process.

### Landfills

As described in the Position Paper, landfills are covered by the Safeguard Mechanism, but they have different coverage and baseline setting arrangements to other facilities. Long term arrangements for landfills covered by the Safeguard Mechanism will be considered prior to the 2026-27 Safeguard Mechanism review. This process 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.

**Table 8 Implementation timeframe**

Item	2023 – 2024	2024 – 2025	2025 – 2026	2026 – 2027
Baseline setting				<i>(will be reviewed as part of Safeguard Mechanism review)</i>
International best practice benchmarks				
EITE monitoring and applications				
Landfill gas arrangements				
Review of Safeguard Mechanism				

## Reviews and evaluation

### Reporting, transparency and accountability

Changes to the NGER Act (Figure 4 Simplified program logicFigure 4) will improve integrity and provide greater certainty that the scheme will deliver on its emissions reduction targets by enhancing its transparency and accountability mechanisms. These changes introduce further specific reporting on progress against the scheme’s emissions targets and a requirement for the Minister to take action, if necessary, in response:

- As part of the Annual Climate Change Statement, the Climate Change Authority (CCA) will report on progress against the scheme’s objectives as set out in the Act, with specific reference to new entrants and expansions.
- Information relating to the scope 1 emissions from approvals of new projects under the Environment Protection and Biodiversity Conservation Act 1999 that are expected to enter the Safeguard Mechanism or increase the emissions of an existing Safeguard facility will be provided to the CCA, the Minister for Climate Change and Secretary of the relevant Department.
- The Minister will need to act where the Secretary of the Department, based upon this information or other information relating to direct emissions from a Safeguard facility from Commonwealth agencies or State and Territory governments, considers changes to the Rules may be needed.
- If any of these tests find that Safeguard emissions have or will breach the Objects, and that this is not due to temporary factors, the Minister is required to consult and amend the Rules, or take other policy actions to ensure the Objects are met.

To provide increased transparency and accountability, the Clean Energy Regulatory (CER) will publish a range of information on facilities’ emissions and compliance activities. In each compliance year, this will include:

- each facilities’ emissions, Safeguard baseline, and net emissions after compliance
- the proportion of their emissions from the major greenhouse gases, namely carbon dioxide, methane and nitrous oxide
- the amount of Safeguard Mechanism Credits (SMCs) earned by the facility

- the number and type of any ACCUs surrendered for compliance, including the method under which these ACCUs were created.
  - Facilities that surrender ACCUs equivalent to 30% of their baselines will need to submit a statement to explain why they haven't undertaken more on-site abatement. Aspects of this will be published to allow scrutiny from investors and the public.

## Safeguard Mechanism reviews

As indicated in the *Safeguard Mechanism Reforms Position Paper January 2023*, there will be a review of policy settings in 2026-27. This review will ensure policy settings are appropriately calibrated after monitoring and evaluating the initial years of the reforms. The review will provide business and the community assurance that the scheme's settings are operating as intended, whilst providing an opportunity to build on and refine its policy architecture. The review will consider, among other things, the initial impacts of resetting and declining baselines, including the costs and availability of domestic offsets; the appropriate treatment of international units; the suitability of arrangements for emissions-intensive, trade-exposed activities; whether the cost containment measure is sufficient; and treatment of flexibility mechanisms beyond 2030, such as banking and borrowing and multi-year monitoring periods.

The review will access information and views from a range of sources, including the enhanced reporting and publication requirements outlined immediately above. An important input will be feedback from Safeguard facilities which is captured by the Department and Clean Energy Regulatory on an ongoing basis, as well as during formal consultation processes through submissions and meeting feedback. Feedback from Safeguard facilities and other stakeholders (for example non-government organisations, investors, ACCU project participants and think-tanks) is expected to provide insights into impacts noted in Question 4 as being difficult to quantify. These include the impact of policy certainty, reduction in capital risk premiums or import tariffs, green premiums and domestic carbon market benefits. This feedback will inform evaluation of the Safeguard in 2026-27, noting that review will have three years of operating experience under the reforms and two years of Safeguard data to draw from.

Baseline decline rates are also proposed to be reviewed during 2026-27. This would include consideration of progress within the current target period (2021 – 2030). Post-2030, baselines are proposed to be predictably set in 5-year blocks, after updates to Australia's Nationally Determined Contribution (NDC) under the Paris Agreement. Decline rates for 2030-31 to 2034-35 would be set by 1 July 2027. Periodic baseline setting would involve consultation and take advice from the Climate Change Authority and the latest Annual Climate Change Statements to Parliament.



Figure 3 Indicative baseline setting timeline

## Evaluation

The 2026-27 review, including the first of the periodic baseline setting reviews, represents a major evaluation point in the implementation of the reforms. To effectively feed into the review, and ensure the smooth implementation of the reforms, regulator monitoring is essential and embedded into the information requirements covered. Safeguard facilities are required to provide to the Clean Energy Regulator<sup>32</sup>. The Clean Energy Regulator in turn has information publication requirements and works closely with DCCEEW to use these and other data to seek to ensure the scheme is effectively and efficiently administered. Over time, it is critical that the reformed scheme operates effectively and efficiently so it delivers the targeted abatement while avoiding unintended consequences and adverse impacts to industrial facilities.

The Safeguard Mechanism also falls within scope of the Climate Change Authority’s five-yearly reviews of the NGER Act. The Climate Change Authority’s next review of the NGER Act is due by the end of 2023.

A simplified program logic is given at **Error! Reference source not found.** Figure 4 to show the relationship between activities, outputs and medium-term (to 2030) and long-term (post 2030) outcomes intended from the reforms. These are framed by the overall objectives taken from the NGER Act. Ongoing evaluation will feed into the 2026-27 review, which provides an opportunity to monitor and adjust as necessary the policy settings to ensure the intended outputs and medium-term outcomes will be met.

Objective
<p>To contribute to the achievement of Australia’s greenhouse gas emissions reduction targets by ensuring that each of the following outcomes (the <i>safeguard outcomes</i>) are achieved:</p> <ul style="list-style-type: none"> <li>(a) net covered emissions from the operation of a designated large facility do not exceed the baseline applicable to the facility;</li> <li>(b) total net Safeguard emissions for all the financial years between 1 July 2020 and 30 June 2030 do not exceed 1,233 million tonnes of carbon dioxide equivalence; and</li> <li>(c) net Safeguard emissions decline to: <ul style="list-style-type: none"> <li>(i) no more than 100 million tonnes of carbon dioxide equivalence in the financial year beginning on 1 July 2029; and</li> <li>(ii) zero for any financial year to begin after 30 June 2049;</li> </ul> </li> <li>(d) the 5-year rolling average Safeguard emissions for each financial year that begins after 30 June 2024 are lower than the past 5-year rolling average Safeguard emissions for that financial year; and</li> <li>(e) the responsible emitter for each designated large facility has a material incentive to invest in reducing covered emissions from the operation of the facility; and</li> </ul>

<sup>32</sup> Through the NGER legislative framework, which includes the Safeguard Mechanism Rule



(f) the competitiveness of trade-exposed industries is appropriately supported as Australia and its regions seize the opportunities of the move to a global net zero economy.			
Activities	Outputs	Medium-term outcomes	Long-term outcomes
<ul style="list-style-type: none"> <li>legislative changes to Safeguard Mechanism Rule to reduce baselines, enable flexibility mechanisms, EITE assistance</li> <li>legislative changes to supporting legislation to give effect to reforms, including creation of Safeguard Mechanism Credits</li> <li>Powering the Regions funding, including \$600 million Safeguard Transformation Stream and a further targeted \$400 million to support sovereign manufacturing capability.</li> </ul>	<ul style="list-style-type: none"> <li>final industry average emissions intensity values made and published in Safeguard Mechanism Rule</li> <li>best practice benchmarks made and published in Safeguard Mechanism Rule</li> <li>regular, enhanced data publications from CER on Safeguard facilities, including generation of SMCs and ACCUs surrendered</li> <li>CCA reporting on progress against the scheme's objectives in the NGER Act to the Annual Climate Change Statement to Parliament</li> </ul>	<ul style="list-style-type: none"> <li>net covered emissions from Safeguard facilities do not exceed baselines</li> <li>net covered emissions from Safeguard facilities reduce each year</li> <li>flexibility mechanisms accessed by facilities to lower compliance costs</li> <li>Safeguard facilities invest in on-site emissions reductions</li> <li>SMCs generated and traded</li> <li>market transparency enhanced by development of Australian Carbon Market Exchange</li> <li>ACCU market sufficiently liquid and deep – cost containment not accessed</li> </ul>	<ul style="list-style-type: none"> <li>net covered emissions from Safeguard facilities decline on a pathway to zero by 2050</li> <li>global competitiveness of Australian industry maintained or enhanced based on decarbonisation to net zero</li> <li>Safeguard facilities' investments in on-site emissions reductions transform their emissions intensity of production</li> </ul>

Figure 4 Simplified program logic

## Challenges and risks to implementation

There are challenges and risks which could impede the Department's and the Clean Energy Regulator's successful implementation of the Safeguard Mechanism reforms. These challenges and risks are identified in Table 10 below, and rated in terms of their likelihood and consequence, in accordance with Table 9.

Table 9 Likelihood and consequence ratings

Likelihood		Consequence	
<b>Low</b>	The identified risk or challenge would be unlikely to eventuate.	<b>Minimal</b>	If the identified risk or challenge does eventuate, it would have a limited effect on the Department's ability to implement the Safeguard Mechanism reforms.
<b>Medium</b>	It is reasonably possible that the identified risk or challenge would eventuate.	<b>Moderate</b>	If the identified risk or challenge does eventuate, it would have a substantial effect on the Department's ability to implement the Safeguard Mechanism reforms.
<b>High</b>	It is likely that the identified risk or challenge would evaluate.	<b>Severe</b>	If the identified risk or challenge does eventuate, it would have a significant effect on the Department's ability to implement the Safeguard Mechanism reforms.

Table 10 Challenges and risks to implementation

Challenge or risk	Likelihood	Consequence	Management
<b>Lack of awareness or understanding by Safeguard Mechanism- covered companies</b> of their responsibilities under the reformed scheme	<b>Low</b>	<b>Moderate</b>	The Department has held three rounds of consultation for the reforms, including roundtables with Safeguard facilities, industry peak bodies, environmental interest groups; a public webinar; and many in-person meetings between the Department and stakeholders; and a large number of submissions have been received. The reforms have also received extensive media coverage. Consequently, it is unlikely that any affected organisations would be unaware of the reforms. DCCEEW and CER will continue to engage closely with stakeholders on an ongoing basis to try to ensure impacted businesses have a thorough understanding of scheme requirements.
<b>Lack of capacity of Safeguard Mechanism- covered companies</b> to meet their responsibilities under the reformed scheme	<b>Medium</b>	<b>Moderate</b>	To avoid Safeguard-covered companies failing to meet their responsibilities, DCCEEW and CER will continue engaging closely to ensure impacted businesses have a thorough understanding of reformed scheme, and the potential consequences of a failure to comply. Keeping stakeholders well-informed will enable businesses to forward plan and make the necessary investments best suited to their circumstances. Tailored funding will be available including for trade-exposed facilities who will be eligible to access the \$600 million STS within the PRF for financial support for investments to reduce scope 1 emissions. An additional \$400 million stream of the PRF will be set aside to support the sovereign manufacturing capability of critical inputs to the energy transition. Lastly, the development of an Australian Carbon Exchange will support Australian industry by increasing market transparency including pricing, lowering transaction costs and reducing red tape. A cost containment mechanism will also be available to mitigate risks of extreme price outcomes.
<b>Government capability:</b> DCCEEW and CER require sufficient funding and staffing resources in order to efficiently implement the reforms to the Safeguard Mechanism, operate effectively as the regulator and monitor and measure the outcomes of the reforms. Insufficient funding or understaffing could impact on the effectiveness of the proposed reforms. capacity.	<b>Medium</b>	<b>Severe</b>	DCCEEW and CER will continue appropriate human resources planning, recruitment and training, to ensure officials engaging with industry are knowledgeable and highly skilled professionals who are able to undertake the policy and regulatory roles, including developing and implementing: <ul style="list-style-type: none"> <li>- site-specific emissions intensity values for all facilities,</li> <li>- international best-practice benchmarks,</li> <li>- the SMC market,</li> <li>- banking and borrowing arrangements, along with:</li> <li>- ongoing auditing, monitoring, and consultation, and</li> <li>- facility level assessments of EITE designation applications.</li> </ul> The staffing and funding requirements will be sought from Government in the relevant budget process. Sufficient resources will be required to effectively monitor the outcomes of the reforms.

Challenge or risk	Likelihood	Consequence	Management
<p><b>Industry capacity</b> risks to successfully implement the reforms include, for example, insufficient availability of auditors to provide the necessary services for site specific emissions intensity determinations.</p>	<p><b>Medium</b></p>	<p><b>Moderate</b></p>	<p>The Safeguard Mechanism Rule will be amended to avoid administrative duplication by clarifying that auditing of site-specific emissions-intensity values is not required for components of applications that have already been audited for the purposes of an NGERs report.</p>

# Glossary

**Australian carbon credit unit (ACCU)** - A unit that represents one tonne of carbon dioxide equivalent (t CO<sub>2</sub>-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 (CO<sub>2</sub>-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

**Decline rate** – Rate of emissions decline for a facility’s baseline

**Domestic offset** – Refers to an Australian carbon credit unit.

**EITE** – Emissions intensive, trade exposed. Safeguard facility designation based on passing trade-exposure and cost-intensity tests.

**Grandfathering** – Preserving and continuing existing arrangements for facilities.

**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.

# Appendix A

## Non-confidential submissions received on Consultation Paper<sup>33</sup>

- AGL Energy
- Ai Group
- AIGN
- Airlines for Australia & New Zealand
- Alcoa of Australia Limited
- Alex Gardner
- Alinta Energy
- Ampol
- Andrew Lenart
- AngloAmerican
- ANU ICEDS
- APA Group
- APPEA
- Association of Mining and Exploration Companies
- ATCO
- AusNet
- Australasian Centre for Corporate Responsibility
- The Australia Institute
- Australian Academy of Technological Services and Engineering
- Australian Aluminium Council
- Australian Banking Association
- Australian Chamber of Commerce and Industry
- Australian Climate and Biodiversity Foundation
- Australian Council of Superannuation Investors
- Australian Council of Trade Unions
- Australian Energy Council
- Australian Financial Market Association
- Australian Forest Products Association
- Australian Gas Infrastructure Group
- Australian Hydrogen Council
- Australian Institute of Petroleum
- Australian Landfill Owners Association
- Australian Parents for Climate Action
- Australian Pipelines and Gas Association
- Australian Projections
- Australian Steel Institute
- Australian Workers Union
- Ben Ewald
- Beyond Gas Network
- BG&E Resources
- BHP
- Bioenergy Australia
- BlueScope Steel Limited
- bp Australia
- Brian Bycroft
- Bureau of Steel Manufacturers of Australia
- Business Council for Sustainable Development Australia
- Business Council of Australia
- C2Zero
- CA ANZ / CPA Australia
- Carbon & Clean Energy Solutions
- Carbon Engineering
- Carbon Market Institute
- Cement Industry Foundation
- Centre of Policy Studies, Victoria University
- Centurion Transport Co
- Chamber of Commerce and Industry WA
- Chamber of Minerals and Energy of WA
- Chemistry Australia
- Citizens' Climate Lobby
- City of Sydney
- Clean Energy Council
- Clean Energy Investor Group
- Climate Action Network Australia
- Climate Analytics
- Climate and Health Alliance
- Climate Change Authority
- Climate Council
- Corporate Carbon
- Culture Amp
- Curtin University Sustainability Policy Initiative
- Darcy Allan

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<sup>33</sup> Published submissions can be accessed at: <https://consult.dceew.gov.au/safeguard-mechanism-reform-consultation-paper>

- David Shearman
- deepC Store Limited
- Dr Monique Ryan, MP
- EDL
- Energetics
- Energy Efficiency Council
- Energy Networks Australia
- Energy Users' Association of Australia
- Engineers Australia
- Environment Institute of Australia & New Zealand
- Environmental Defenders Office
- Farmers for Climate Action
- Fortescue Metals
- Freight on Rail Group
- Frontier Economics
- Gas Energy Australia
- Gerald Jensen
- GetUp
- Glen Michel
- Glencore
- Gordon Kennard
- Grattan Institute
- Greening Australia
- Greenpeace Australia Pacific
- Hesta
- Hydro Tasmania
- Iberdrola Australia
- Idemitsu Australia
- Incitec Pivot
- Inpex
- Institute of Public Accountants
- Investor Group on Climate Change
- Janaline Oh and Nick Withers
- Jason Wilk
- Jeff Wilson
- John Lane
- John Robert
- Kate Chaney MP
- Kawasaki Heavy Industries
- Kevin Cox
- Lana Friesen, Andrea La Nauze and Ian MacKenzie
- Law Society of NSW
- Lighter Footprints Inc
- Lock the Gate Alliance
- Low Emission Technology Australia
- Lyn Taylor
- Manufacturing Australia
- Mark Carter
- Matt Sullivan
- Merlon Capital Partners
- Mike Buckley
- Minerals Council of Australia
- National Environmental Law Association
- National Farmers Federation
- National Waste Recycling Industry Association
- Neil Longmore
- Nick Abel
- Northmore Gordon
- NRM Regions Australia
- NSW Government
- NSW Minerals Council
- Opal
- Origin Energy
- Peoples Climate Assembly
- Perth Hills Climate Change Interest Group Inc
- Peter Todd
- Pollination
- Property Council of Australia
- PwC
- Queensland Pacific Metals
- Reputex
- Rio Tinto
- Sacome
- Sophie Scamps MP
- South32
- Student Environment and Animal Law Society
- Tamboran Resources
- Tasman Environmental Markets
- Team Global Express
- The Bloomfield Group
- Tilt Renewables
- Tim Bateman
- Tim Kelly
- Transborders Energy
- Uniting Church (Vic & Tas)
- Veoila Environmental Services Australia
- Virgin Australia
- Voluntary Carbon Markets Association
- WA EPA
- Waste Management and Resource Recovery Association of Australia
- Whitehaven
- Wilderness Australia
- Woodside Energy
- WWF
- Zali Steggall MP

## Non-confidential submissions received on Draft Bill<sup>34</sup>

- Alinta Energy
- AMEC
- APPEA
- Australasian Centre for Corporate Responsibility
- The Australia Institute
- Australian Aluminium Council
- Australian Conservation Foundation
- Australian Financial Markets Association
- Australian Pipelines and Gas Association
- Australian Projections
- Australian Workers Union
- Bioenergy Australia
- BP
- Business Council for Sustainable Development Australia
- Business Council of Australia
- Carbon Market Institute
- Cement Industry Foundation
- Chemistry Australia
- Claudia Tegoning
- Clean Renewable Energy Designs
- Climate Action Burwood Canada Bay
- deepC Store
- Energy Users' Association of Australia
- Environmental Defenders Office
- Fortescue Metals
- Glencore
- Greening Australia
- Idemitsu Australia
- INPEX
- Minerals Council of Australia
- Origin
- Queensland Conservation Council
- SACOME
- Tim Kelly
- Transborders Energy
- Whitehaven

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<sup>34</sup> Published submissions can be accessed at: <https://consult.dcceew.gov.au/safeguard-mechanism-reform-consultation>



# Non-confidential submissions received on Proposed Design<sup>35</sup>

- ACF Community Members
- ACF Community Chisolm
- AGL Energy
- Aimee Poznik
- Airlines for Australia and New Zealand
- Alexander Chiew
- Alinta Energy
- Allegra Spender MP
- AM Wylie
- AMEC
- Amy Blain
- AngloAmerican
- Anna Markey
- Anna Molan
- Anne Highfield
- Annie Close
- APA Group
- APPEA
- ATCO
- Aurecon
- Australia Institute
- Australian Academy of Technological Sciences and Engineering
- Australian Aluminium Council
- Australian Climate and Biodiversity Foundation
- Australian Conservation Foundation
- Australian Council of Superannuation Investors
- Australian Energy Council
- Australian Financial Markets Association
- Australian Forest Products Association
- Australian Industry Greenhouse Network
- Australian Institute of Company Directors
- Australian Institute of Landscape Architects
- Australian Manufacturing Workers' Union
- Australian Parents for Climate Action
- Australian Pipelines and Gas Association
- Australian Projections Pty Ltd
- Australian Rainforest Conservation Society
- Australian Sustainable Finance Institute
- AWU & MEU
- Azalea Azarae
- Bayside Climate Crisis Action Group
- Ben Connor
- Ben Hall
- Better Futures Australia
- Beyond Gas Network
- BHP
- Bianca Sands
- Bingo Industries
- Blue Derby Wild
- BlueScope
- BMO Radicle
- BP
- Brenda Gerrie
- Bureau of Steel Manufacturers of Australia
- CA ANZ / CPA Australia
- Calix
- Canberra Move Beyond Coal and 350.org
- Carbon Market Institute
- Carbon Pump
- Carly Robertson
- Caroline Le Couteur
- Cement Industry Federation
- Centurion Transport
- Chamber of Minerals & Energy of Western Australia
- Chemistry Australia
- Chevron Australia
- Chris Cook
- Chris Johansen
- Climate Action Network Australia
- Climate Analytics
- Climate Change Balmain Rozelle
- Climate Council
- Climate Energy Finance
- Climate Friendly
- Climate Resource
- Climateworks Centre
- Community Energy for Goulburn
- Conservation Council ACT Region
- Darius Kedros
- David Booth
- David Pepper
- David Williams

<sup>35</sup> Published submissions can be accessed at: <https://consult.dceew.gov.au/safeguard-mechanism-reform-consult-on-design>

- Deborah Punton
- deepC Store
- Delta Electricity
- Denise Martin
- Derek Bolton
- Doctors for the Environment Australia
- Electrical Trades Union
- Energy Efficiency Council
- Energy Networks Australia
- Energy Users Association Australia
- Engineers Australia
- Environmental Advocacy in Central Queensland
- Environmental Defenders Office
- First Sentier Investors
- Flight Free Australia
- Fortescue Metals
- Fusion Party
- Geelong Sustainability
- Gerard De Ruyter
- GetUp
- Glen Eira Emergency Climate Action Network
- Glencore
- Grange Resources
- Grattan Institute
- Green Building Council of Australia
- Greening Australia
- Greenpeace Australia Pacific
- Howard Brownscombe
- Howard Doddrell
- Hydro Tasmania
- Ian Dunlop
- Inpex
- Investor Group on Climate Change
- Jane Stabb
- Janet Burstall
- Janette Allison
- Jenna Condie
- Jessie Wells
- John Hughes
- J-Power Latrobe Valley
- Judith Bourne
- Kate Ashdown
- Kate Chaney MP
- Kathleen Davies
- Kathryn Boin
- Kerry Flattley
- Labor Environment Action Network
- Leslie Thornton
- Lighter Footprints
- Limestone Association of Australia
- Lock the Gate Alliance
- Madeleine Serong
- Manufacturing Australia
- Marg Taylor
- Maritime Union of Australia
- Mark Sims
- Maryvale Energy from Waste
- Minerals Council of Australia
- Mornington Peninsula Labor Environmental Action Network
- Natasha Prewett
- National Environmental Law Association
- Nick Abel
- Noel Skrzypczak
- Northmore Gordon
- NSW Minerals Council
- Opal Group
- Orica
- Origin Energy
- Patricia Saunders
- Peoples Climate Assembly
- Peter Cook
- Pieter van der Vegte
- Planet Zero Waste
- PNGnuiti Management
- Pottinger
- PwC
- Queensland Conservation Council
- Ray Stephens
- Rio Tinto
- Rob B
- Robert Davis
- Robin Gardner
- Roy Hill
- SACOME
- Sarah King
- Sharee McCammon
- Simon Campbell
- Siobhain O'Leary
- Smart Energy Council
- South32
- Stephen Pfeiffer
- Steve Gates
- The Community
- Tim Kelly
- Tom Fisher

- Tom Knowles
- Tomago Aluminium
- Transborders Energy
- United Workers Union
- Uniting Church Vic and Tas
- University of Melbourne
- Vanessa Shambrook
- Vets for Climate Action
- Victorian Greenhouse Alliances
- Whitehaven
- Yarra Climate Action Now

