



## Statement of reasons under s 22XS(1B) of the *National Greenhouse and Energy Reporting Act 2007* (NGER Act) – How the *National Greenhouse and Energy Reporting (Safeguard Mechanism) Rule 2015* as amended by the *2024 Production Variables Update* delivers the legislated safeguard outcomes

1. In accordance with section 22XS(1A) and (1B) of the NGER Act, this statement sets out my reasons for being satisfied that the *National Greenhouse and Energy Reporting (Safeguard Mechanism) Rule 2015 (Safeguard Rules)* as amended by the *National Greenhouse and Energy Reporting (Safeguard Mechanism) Amendment (Production Variables Update) Rules 2024 (2024 Production Variables Update)* is consistent with each of the safeguard outcomes in paragraphs 3(2)(b), (c) and (d), and that they take into account the safeguard outcomes in paragraphs 3(2)(e) and (f), of the NGER Act.

### Summary

2. The 2024 Production Variables Update makes changes to the Safeguard Rules by adding new production variables (**PVs**), updating existing PVs, setting industry average emission intensities (also referred to as default emissions intensities or **default EIs**), and making technical changes to ensure outcomes are achieved as intended. The changes to PVs and EIs ensure a comprehensive set of suitable PVs are in place for setting Safeguard Mechanism baselines, while incentivising low emissions production.
3. The PVs and default EIs that are the subject of the 2024 Production Variables Update and the *National Greenhouse and Energy Reporting (Safeguard Mechanism) Amendment (Production Variables Update) Rules 2023 (2023 Production Variables Update)* were reviewed to ensure the PVs are technically correct and the default EIs represent industry average emissions intensities. Taken together, the amended PVs and default EIs better support incentives for decarbonisation by providing a suitable basis for setting baselines that reflect emissions per unit of production.
4. The 2024 Production Variables Update also outlines best practice emissions intensities (**best practice EIs**) for 18 PVs. The best practice EIs have been set in accordance with the Guidelines for setting international best practice benchmarks (the **Guidelines**). Best practice EIs are used for setting new facility baselines (emissions limits) at international best practice, adapted for an Australian context. In the absence of international data, domestic data or other supplementary approaches outlined in the Guidelines are used. This sends a strong signal to investors that Australia is serious about net zero, and new investments must support this goal.

5. The 2024 Production Variables Update also includes a number of technical amendments (summarised in subparagraph 21(j) below) to the Safeguard Rules to clarify the original policy intent and to ensure outcomes are achieved as intended.
6. The Safeguard Rules as amended by the 2024 Production Variables Update deliver the required emission reductions consistent with safeguard outcomes 3(2)(b), (c) and (d), while providing strong incentives to reduce onsite emissions at each designated large facility, and supporting the competitiveness of trade exposed industries in accounting for safeguard outcomes 3(2)(e) and (f) of the NGER Act. The Safeguard Rules as amended ensure that:
  - a. Enforceable baselines are set for the net emissions of each designated large facility (relevant to safeguard outcome (a) - but noting that this safeguard outcome is not engaged by the requirement in section 22XS(1A) of the NGER Act)
  - b. Baselines will decline and are reasonably expected to achieve the 1,233 million tonne 10-year limit on total net Safeguard emissions (referred to as the 'net emissions budget'), including with an appropriate reserve for uncertainty about future emissions (relevant to safeguard outcome (b))
  - c. The baseline decline is reasonably expected to result in less than 100 million tonnes of net Safeguard emissions for the financial year beginning on 1 July 2029, and baselines will be set at zero from 30 June 2049 (relevant to safeguard outcome (c))
  - d. The incentives created are reasonably expected to result in declining emissions consistent with the 5-year rolling average for each financial year that begins after 30 June 2024 (relevant to safeguard outcome (d))
  - e. Strong incentives from baseline decline and Safeguard Mechanism Credits continue to provide a material incentive for the responsible emitter for each designated large facility to invest in reducing covered emissions from the operation of their facilities (relevant to safeguard outcome (e))
  - f. Competitiveness of trade-exposed industries is supported, including through trade exposed baseline adjusted provisions (relevant to safeguard outcome (f)).

**Definitions**

<b>Abbreviation</b>	<b>Definition</b>
2023 Production Variables Update	The <i>National Greenhouse and Energy Reporting (Safeguard Mechanism) Amendment (Production Variables Update) Rules 2023</i>
2024 Production Variables Update	The <i>National Greenhouse and Energy Reporting (Safeguard Mechanism) Amendment (Production Variables Update) Rules 2024</i>
ACCU	Australian Carbon Credit Unit, which has the same meaning as in the <i>Carbon Credits (Carbon Farming Initiative) Act 2011</i> .
Baseline	The baseline emissions number for a facility, as specified in section 22XL of the NGER Act.

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<b>Abbreviation</b>	<b>Definition</b>
Best practice emissions intensity (best practice EI)	Has the meaning defined in section 4 of the Safeguard Rules. i.e., for a production variable for a financial year, means the best practice emissions intensity (if any) specified, in t CO <sub>2</sub> -e per unit of the production variable, in relation to the production variable in Schedule 1 as in force at: <ul style="list-style-type: none"> <li>(a) if the financial year is the financial year beginning on 1 July 2023—the end of the financial year; or</li> <li>(b) otherwise—the start of the financial year.</li> </ul>
CO <sub>2</sub> -e	Abbreviation for carbon dioxide equivalent, a way of quantifying greenhouse gases to reflect their contribution to climate change compared to a unit of carbon dioxide equivalent. In the NGER Act, the carbon dioxide equivalence of an amount of greenhouse gas, means the amount of the gas multiplied by a value specified in the regulations in relation to that kind of greenhouse gas.
Covered emissions	Has the meaning given by section 22XI of the NGER Act i.e. scope 1 emissions of one or more greenhouse gases, other than emissions of a kind specified in the Safeguard Rules.
Department	Department of Climate Change, Energy, the Environment and Water
Default emissions reduction contribution	For a financial year, has the meaning given by section 31 of the Safeguard Rules.
Designated large facility	A facility covered by the Safeguard Mechanism, as defined in section 22XJ of the NGER Act.
Default Emissions Intensity (default EI)	Has the meaning defined in section 4 of the Safeguard Rules. i.e., for a production variable for a financial year, means the default emissions intensity specified, in t CO <sub>2</sub> -e per unit of the production variable, in relation to the production variable in Schedule 1 as in force at the start of that financial year.
Emissions intensity determination	A determination made under section 19 of the Safeguard Rules. Emissions intensity determinations set facility-specific EIs for existing facilities.
Existing facility	Has the meaning given in section 12(1) of the Safeguard Rules. I.e., a facility is an existing facility if there are one or more historical production variables or transitional production variables for the facility.
Facility	An activity or a series of activities that involve greenhouse gas emissions, the production of energy or the consumption of energy, as defined in section 9 of the NGER Act.
Historical financial year	Has the meaning defined in section 12(3) of the Safeguard Rules. I.e., a historical financial year is a financial year that started after 30 June 2016 and ended before 1 July 2022.
Historical production variable (historical PV)	Has the meaning defined in section 12(2) of the Safeguard Rules (as amended by the Production Variables Update No 2). I.e., a historical production variable, for a facility, is a production variable that was applicable to the facility, in accordance with Schedule 1, at any time during a historical financial year; and was not a non-commercial production variable for the facility for the historical financial year.
Mt	Million tonnes
NDC	Nationally Determined Contribution under the Paris Agreement

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<b>Abbreviation</b>	<b>Definition</b>
Net covered emissions	Means the total amount, in tonnes of carbon dioxide equivalence, of covered emissions for a particular designated large facility adjusted for the total amount of prescribed carbon units (ACCUs or SMCs) surrendered. The NGER Act established the Safeguard Mechanism to ensure that net covered emissions of greenhouse gases from the operation of a designated large facility do not exceed the baseline applicable to the facility.
Net emissions budget	The 1,233 million tonne limit on net Safeguard emissions for all of the financial years between 1 July 2020 and 30 June 2030 referred to in safeguard outcome (b).
Net emissions number	Has the meaning given by section 22XD of the NGER Act, i.e., 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 the period: <ul style="list-style-type: none"> <li>(a) reduced by surrendered prescribed carbon units; and</li> <li>(b) increased by Australian carbon credit units that were issued in relation to the facility.</li> </ul>
Net Safeguard emissions	For a financial year, means the total amount, in tonnes of carbon dioxide equivalence, of net covered emissions from the operation, during the financial year, of all designated large facilities in the financial year, as defined in section 7 of the NGER Act.
New facility	Has the meaning given in section 29(2) of the Safeguard Rules. I.e., a facility is a new facility if there are no historical production variables or transitional production variables for the facility.
NGER Act	<i>National Greenhouse and Energy Reporting Act 2007</i>
Prescribed carbon unit	Has the meaning given by section 22XM of the NGER Act, namely ACCUs and SMCs.
Responsible emitter	The person with operational control of a facility (see further section 22XH of the NGER Act).
Safeguard Mechanism	A mechanism to ensure the net covered emissions of greenhouse gases from the operation of a designated large facility do not exceed the baseline applicable to the facility and ensure that aggregate net covered emissions from the operation of designated large facilities decline. The mechanism is established under Part 3H of the NGER Act.
Safeguard Reforms Amendment Rules	<i>The National Greenhouse and Energy Reporting (Safeguard Mechanism) Amendment (Reforms) Rules 2023</i>
Safeguard Rules	<i>National Greenhouse and Energy Reporting (Safeguard Mechanism) Rule 2015</i>
Safeguard emissions	For a financial year, means the total amount in tonnes of carbon dioxide equivalence, of covered emissions from the operation, during the financial year, of all designated large facilities for the financial year, as defined in section 7 of the NGER Act.
Scope 1 emissions	Emissions released to the atmosphere as a direct result of an activity, or series of activities at a facility level (sometimes referred to as direct emissions).
SMCs	Safeguard Mechanism Credit units, which are units issued under section 22XNA of the NGER Act.
TEBA facilities	Trade-exposed baseline-adjusted facilities

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Abbreviation	Definition
Trade exposed facilities	Designated large facilities for which the primary production variable is listed in Schedule 2 of the Safeguard Rules, as amended. The primary production variable for a facility is the production variable that is most significant for its operation, having primary regard to the share of revenue and covered emissions attributable to that production variable.
Transitional production variable	<p>Has the meaning given in section 12(4) of the Safeguard Rules. i.e., transitional production variable, for a facility, is a production variable that:</p> <ul style="list-style-type: none"><li>(a) was not applicable to the facility, in accordance with Schedule 1, at any time during a historical financial year; and</li><li>(b) was applicable to the facility, in accordance with Schedule 1, at a time during the financial year beginning on 1 July 2022; and</li><li>(c) was not a non-commercial production variable for the facility for the financial year beginning on 1 July 2022.</li></ul> <p>A transitional production variable is used for calculating the facility's baseline, and the facility-specific emissions intensity number is set to be equal to the default emissions intensity number for that production variable.</p>

7. Note that numbers in this document designated with an \* have been rounded to a whole number. Values may not add to totals due to rounding.

## Key legislative provisions

8. Section 22XS of the NGER Act relevantly provides:
- (1A) The Minister must not make safeguard rules unless the Minister is satisfied that those rules:
    - (a) are consistent with each of the safeguard outcomes in paragraphs 3(2)(b), (c) and (d); and
    - (b) take into account the safeguard outcomes in paragraphs 3(2)(e) and (f).
  - (1B) If the Minister makes safeguard rules, the Minister must publish on the Department's website the Minister's reasons for being satisfied that the safeguard rules:
    - (c) are consistent with each of the safeguard outcomes in paragraphs 3(2)(b), (c) and (d); and
    - (d) take into account the safeguard outcomes in paragraphs 3(2)(e) and (f).
9. Section 3(2) of the NGER Act sets out the safeguard outcomes as follows:
- (2) The second object of this Act is 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 of greenhouse gases from the operation of a designated large facility do not exceed the baseline applicable to the facility;
    - (b) total net safeguard emissions for all of the financial years between 1 July 2020 and 30 June 2030 do not exceed a total of 1,233 million tonnes of carbon dioxide equivalence;
    - (c) net safeguard emissions decline to:
      - (i) no more than 100 million tonnes of carbon dioxide equivalence for the financial year beginning on 1 July 2029; and
      - (ii) zero for any financial year to begin after 30 June 2049;
    - (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;
    - (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;
    - (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.

## Background

### *Reform to the Safeguard Mechanism*

10. The NGER Act establishes a single national framework for reporting and disseminating company information about greenhouse gas emissions, energy production, energy consumption and other information. The Safeguard Mechanism is established under Part 3H of the Act. Together with the reporting obligations under the Act, the Safeguard Mechanism provides a framework for Australia's largest industrial emitters to measure, report and manage their emissions.
11. The Safeguard Mechanism provides a legislated framework that limits the net covered emissions of around 215 large industrial facilities—those with more than 100,000 tonnes of scope 1 (direct) carbon dioxide equivalent (CO<sub>2</sub>-e) emissions each year ('designated large facilities' under s 22XJ of the NGER Act). Each year, every designated large facility needs to prove that their net covered emissions for that year are equal to or below their baseline. Each designated large facility reports their emissions to the Clean Energy Regulator, which publishes the results on its website.
12. Since the Safeguard Mechanism commenced on 1 July 2016, reported covered emissions from designated large facilities grew over 4 per cent from 131.3 Mt CO<sub>2</sub>-e in 2016-17 to 137.5 Mt CO<sub>2</sub>-e in 2021-22.<sup>1</sup>
13. Under the Paris Agreement, to which Australia is a Party, Parties are required to communicate their Nationally Determined Contribution (NDC) which sets out their emissions reduction commitments. On 16 June 2022, Australia communicated its updated NDC under Article 4 of the Paris Agreement to the United Nations.<sup>2</sup> This updated NDC included confirmation of Australia's commitment to achieve net zero emissions by 2050, and a new, increased 2030 target of 43 per cent below 2005 levels by 2030. The *Climate Change Act 2022* prescribes these commitments into Australian law.
14. On 30 March 2023, Parliament passed the Safeguard Mechanism (Crediting) Amendment Bill 2023. It amended the NGER Act and other legislation, to establish the framework to give effect to key elements of the reforms, such as introducing SMCs to the scheme to provide an incentive to facilities to go beyond their baselines. Much of the detail of the Safeguard Mechanism is set out in legislative rules, primarily the Safeguard Rules.
15. On 3 May 2023, I made a decision to amend the Safeguard Rules to reduce emissions consistent with the legislated targets. The amendments made by the *National Greenhouse*

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<sup>1</sup> Designated large facility emissions are published by the Clean Energy Regulator at: <https://www.cleanenergyregulator.gov.au/NGER/The-safeguard-mechanism/safeguard-data/safeguard-facility-reported-emissions>

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

*and Energy Reporting (Safeguard Mechanism) Amendment (Reforms) Rules 2023* (Safeguard Reforms Amendment Rules) were to support industry to reduce emissions efficiently, and to help them maintain competitiveness as the global economy decarbonises. On the same day, I gave my reasons for being satisfied that the Safeguard Rules as amended by Safeguard Reforms Amendment Rules are consistent with each of the safeguard outcomes in paragraphs 3(2)(b), (c) and (d), and that they take into account the safeguard outcomes in paragraphs 3(2)(e) and (f), of the NGER Act. Those reasons are published on the Department's website in accordance with section 22XS(1B) of the NGER Act.

16. The Safeguard Reforms Amendment Rules, and the reforms made by those rules, commenced on 1 July 2023.
17. As part of the reform to the Safeguard Mechanism, the Government committed to reviewing PVs to ensure they are effective in meeting the emissions reduction objectives of the reforms, including by encouraging facilities to reduce their emissions as well as incentivising production to occur where it is least emissions intensive. As part of the review, the Government has also recalculated certain default EI associated with PVs to ensure relevance and consistency with the reforms. These PVs and default EIs are an input to the calculations for determining the baseline emissions number for each existing facility.
18. On 29 September 2023, I made the 2023 Production Variables Update which amended the Safeguard Rules to update Safeguard Mechanism PVs. On the same day, I set out my reasons for being satisfied that the Safeguard Rules as amended by the 2023 Production Variables Update are consistent with each of the safeguard outcomes in paragraphs 3(2)(b), (c) and (d), and that they took into account the safeguard outcomes in paragraphs 3(2)(e) and (f), of the NGER Act. Those reasons are published on the Department's website in accordance with section 22XS(1B) of the NGER Act.
19. The 2024 Production Variables Update builds upon the 2023 Production Variables Update to fulfil the Government's commitment to review PVs and finalise the recalculation of certain default EIs for existing facilities. It also makes the first set of best practice EIs.

#### ***Amendments to the Safeguard Rules***

20. Section 22XS of the NGER Act empowers me to make rules to implement the Safeguard Mechanism by legislative instrument. These rules may prescribe matters required or permitted by the NGER Act and matters necessary or convenient to be prescribed for carrying out or giving effect to the Safeguard provisions in the NGER Act. The Safeguard Rules are a legislative instrument made under section 22XS(1) of the NGER Act. The 2024 Production Variables Update amends the Safeguard Rules.
21. The 2024 Production Variables Update makes the following amendments to the Safeguard Rules:
  - a. It amends PVs used for steel production to ensure the definitions are technologically neutral and broadly applicable;
  - b. It amends the definition of the rail transport activity to be technology-neutral, relevant to four rail PVs;



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- c. It amends the sodium cyanide PV so that it can include sodium cyanide manufactured using caustic soda imported to a facility;
- d. It amends the definition of 'intermediate nickel products' to include mixed nickel-cobalt hydroxide precipitate that has a concentration of nickel between 20% and 47%, relevant to three nickel PVs;
- e. It inserts seven new PVs: mine rehabilitation, two hydrogen PVs, lithium ore, renewable diesel, renewable aviation kerosene, and exported steam related to the ethene production activity;
- f. It inserts eight new default EIs for lithium hydroxide, lithium ore, mine rehabilitation, exported steam related to the ethene production activity, refined lead, ethane, primary steel and primary iron;
- g. It updates eight existing default EIs for zinc-in-fume, ethene, polyethene, newsprint, glass container manufacturing and three steel sector PVs (pellets, lime and coke) to better reflect current industry conditions or changed PV definitions; and
- h. Sets an updated default EI for the petroleum refining PV that reflects the higher emissions intensity associated with meeting new sulfur and aromatics standards for petrol, expected to commence from December 2025. This default EI may be used by a refinery in the financial year it complies with both standards.
- i. Sets 18 best practice EIs relevant to the oil and gas, mining, steel, hydrogen, electricity and iron sectors.
- j. Makes a number of technical amendments, including to: extend the eligibility of facilities that are no longer Safeguard facilities to receive SMCs; encourage existing facilities to apply for an emissions intensity determination by setting emissions intensity values for relevant PVs to 0 if the facility has not made an application for a determination; clarify that covered emissions (not scope 1 emissions) are relevant for landfill baselines; clarify that ACCUs cannot be issued for a reduction in covered emissions; clarify that an existing facility is a facility that commenced commercial production prior to the reforms commencing on 1 July 2023; and clarify how to apportion emissions if more than one PV is applicable to facility.

### *Consultation*

22. In February 2023, the Department commenced consultation directly with impacted stakeholders on options to amend certain PVs and EIs. Consultation has been undertaken to understand the best approach to setting PVs and EIs in a way that will encourage, recognise and reward emissions abatement, and appropriately incentivise low emissions production.
23. The Government consulted on the draft Guidelines from 19 July 2023 to 11 August 2023 and released the final Guidelines on 15 December 2023.
24. On 15 December 2023, the Government released for consultation an exposure draft of the 2024 Production Variables Update, with the consultation period open until 5pm on 16 January 2024, with extensions granted on request until 23 January 2024.

25. The Government received 40 formal submissions, comprising 26 submissions from designated large facilities or businesses, nine from industry associations and the remaining from five individuals and non-government organisations. The Department will publish non-confidential submissions on its website. Submissions on PVs and default EIs were broadly supportive of the updates. Submissions on the proposed best practice EIs raised concerns about the level of the EIs, both that they appeared too high and too low, and requested more transparency on how the values were determined. In response to the submissions received following the consultation, six proposed default EIs and six best practice EIs were updated and three oil and gas best practice EIs were not included in the Safeguard Rules to allow for further consultation. The explanatory statement details how the best practice EIs were developed, including an explanation of how the Guidelines were applied. Technical changes were also made to the lithium ore, petroleum refinery and steel production variables, taking into account feedback received.

### Material on which my decision was based

26. My decision that I was satisfied that the Safeguard Rules as amended are consistent with each of the outcomes in paragraphs 3(2)(b), (c) and (d), and take into account the safeguard outcomes in paragraphs 3(2)(e) and (f) was made after considering a brief from the Department (MS24-000090), which contained the following attachments relevant to this decision:

- a. *National Greenhouse and Energy Reporting (Safeguard Mechanism) Amendment (Production Variables Update) Rules 2024;*
- b. Explanatory Document: National Greenhouse and Energy Reporting (Safeguard Mechanism) Amendment (Production Variables Update) Rules 2024;
- c. Safeguard Mechanism: Prescribed production variables and default emissions intensities– a document that sets out the emissions relevant for determining default and best practice EIs, and emissions relevant for apportioning emissions between PVs in emissions intensity determinations;
- d. Safeguard net and gross emissions analysis – Calculations from the Department relating to the Safeguard emissions budget, total baseline emissions, and analysis relating to 5 year rolling average emissions outcomes, based on projections of onsite abatement taken from *Australia's emissions projections 2023*; and
- e. A summary of the stakeholder consultations.

### Reasons

**I am satisfied that the Safeguard Rules as amended are consistent with safeguard outcome (b): that total net safeguard emissions for all of the financial years between 1 July 2020 and 30 June 2030 do not exceed a total of 1,233 million tonnes of carbon dioxide equivalence.**

27. The 2024 Production Variables Update updates certain PVs and default EIs and inserts new PVs, default EIs and 18 best practice EIs into Schedule 1 of the Safeguard Rules. Updates to PVs better reflect the emissions sources that contribute to the default EI associated with each PV. Updated and new PVs, default EIs, and best practice EIs in Schedule 1 of the Safeguard Rules contribute to updated baseline emission numbers for existing facilities as set out in

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Division 2, Part 3 of the Safeguard Rules. Best practice EIs will only apply to an existing facility if it begins new production of a PV. The best practice EIs in Schedule 1 will impact the baseline emissions number for a new facility in accordance with the formula set out in section 29 of the Safeguard Rules.

28. Safeguard outcome (b) is engaged because PV definitions, default EIs and best practice EIs are used to calculate Safeguard baselines, which affect net Safeguard emissions, and the Safeguard Mechanism requires designated large facilities to have net emissions below their baseline.
29. The Department has updated its net emissions analysis, which I relied on for my 3 May 2023 statement of reasons and 29 September 2023 statement of reasons, to reflect the effect of the 2024 Production Variables Update, *Australia's emissions projections 2023* (published by the Department in November 2023), the latest Safeguard emissions data for 2022-23 published by the Clean Energy Regulator, and other updates to reflect new data and revised baseline estimates. The update also reflects revised production forecasts for some facilities, and new projections of onsite abatement, consistent with *Australia's emissions projections 2023*. The updated analysis also takes into account that some facilities began commercial production in 2022-23. If these facilities are covered by the Safeguard, they will use default EIs rather than best practice EIs due to the transitional production variable provisions in the Safeguard Rules.
30. I have taken the results of the Department's updated net emissions analysis, which is described below, into account to be satisfied that the Safeguard Rules as amended are consistent with safeguard outcome (b). In summary, the updated estimated aggregate baselines will be slightly higher because of the changes to PVs and EIs in the 2024 Production Variables Update. However, the updated estimated aggregated baselines will still be well under the Safeguard net emissions budget of 1,233 Mt for the period 1 July 2020 and 30 June 2030. Designated large facilities must keep their net emissions below their baseline and this analysis continues to show that net Safeguard emissions will remain under the maximum of 1,233 tonnes of CO<sub>2</sub>-e in safeguard outcome (b).
31. The 1,233 Mt CO<sub>2</sub>-e Safeguard net emissions budget for the period 1 July 2020 and 30 June 2030 corresponds to an 821\* Mt CO<sub>2</sub>-e net emissions budget for the period between 2023-24 to 2029-30, reflecting reported net emissions of 412\* Mt between 2020-21 and 2022-23. My most recent statement of reasons of 29 September 2023 estimated the net emissions budget as 815 Mt for the period between 2023-24 to 2029-30, which assumed 418\* Mt CO<sub>2</sub>-e would be emitted from designated large facilities over the period 2020-21 to 2022-23, reflecting the

*Australia's emissions projections 2022*.<sup>3</sup> The updated budget reflects the latest reported Safeguard emissions data for 2022-23 published by the Clean Energy Regulator.<sup>4</sup>

32. My Department's net emissions analysis underpinning the 29 September 2023 amendments projected baselines to total net emissions of 793\* Mt CO<sub>2</sub>-e between 2023-24 to 2029-30 having regard to the changes made by the 2023 Production Variables Update.<sup>5</sup> My Department has updated the net emissions analysis to reflect the updates described in paragraph 29 above, including the 2024 Production Variables Update, and this results in an increase in net covered emissions to 802\* Mt between 2023-24 to 2029-30. The 2024 Production Variables Update contributes 1\* Mt CO<sub>2</sub>-e to this increase, with the balance reflecting updates based on the *Australia's emissions projections 2023* and other revisions described in paragraph 29 above.
33. The net emissions analysis I considered in relation to 2023 Production Variables Update allowed for a reserve, to account for uncertainty about future emissions, of 22\* Mt CO<sub>2</sub>-e.<sup>6</sup> The change in net emissions described above (802 Mt compared to 793 Mt) and the change in the net emissions budget (821 Mt compared to 815 Mt) means that the reserve is now estimated at 19\* Mt CO<sub>2</sub>-e.
34. Baselines for new facilities under the Safeguard Rules will be set at international best practice El (as outlined in Part 3, Division 3 of the Safeguard Rules). Net covered emissions from new facilities are estimated at 4\* Mt to 2030, compared to 13\* Mt in the September statement of reasons. The reduction is primarily due to *Australia's emissions projections 2023* indicating fewer new facilities will be covered by the Safeguard with some of these facilities reclassified as transitional facilities.
35. My Department's net emissions analysis accounts for the impact of likely TEBA facilities, which receive a lower baseline decline rate. The 2024 Production Variables Update adds renewable aviation kerosene, renewable diesel, gaseous hydrogen, liquefied hydrogen, primary iron, primary steel and lithium ore to the trade exposed PVs listed in Schedule 2 of the Safeguard Rules. Facilities that have these PV as their primary PV may be eligible for TEBA status. For the case of the primary steel PV, this addition to the list does not change expected net emissions because this PV will be used by facilities already assumed to have TEBA status in the Department's analysis. The addition of the other PVs will apply to facilities that are not yet

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<sup>3</sup> See paragraph 27 of the statement of reasons of 29 September 2023 for the 2023 Production Variables Update.

<sup>4</sup> Clean Energy Regulator (2024) Safeguard facility reported emissions data, accessed at <https://cer.gov.au/markets/reports-and-data/safeguard-facility-reported-emissions-data>

<sup>5</sup> See paragraph 27 of the statement of reasons of 29 September 2023 for the 2023 Production Variables Update.

<sup>6</sup> See paragraph 28 of the statement of reasons 29 September 2023 for the 2023 Production Variables Update.

designated large facilities. The potential future access to TEBA arrangements by operations which are not yet designated large facilities is mitigated by the existence of the reserve.

36. The amendments made by the 2024 Production Variables Update also ensure that existing facilities should have a baseline determined from a combination of default EIs and facility-specific EIs (which are set by the Clean Energy Regulator in emissions intensity determinations) for their historical PVs (PVs for which the facility engaged in commercial production between 1 July 2017 and 30 June 2022). This is directed at achieving the policy settings relevant to the safeguard outcomes. If an existing facility has not applied for an emissions intensity determination for one of its historical PVs and the best practice EI for that PV has not yet been set, then the amendments made by the 2024 Production Variables Update will mean that the EI is set to zero for the relevant PV, where it is a historical PV for the facility. My Department's net emissions analysis assumes existing facilities use a baseline set using a combination of default and facility-specific EIs, as intended by the Safeguard reforms. This amendment encourages compliance with the requirement to apply for emissions intensity determinations.
37. I am satisfied that the Safeguard Rules as amended are consistent with safeguard outcome (b), for the reasons outlined in paragraphs 29-35 of my 3 May 2023 statement of reasons, having regard to my Department's updated analysis setting out expected net covered emissions of 802\* Mt CO<sub>2</sub>-e net as a result of the 2024 Production Variable Update and the 821\* Mt CO<sub>2</sub>-e net emissions budget for the period between 2023-24 to 2029-30, described in paragraphs 30 to 33 above.

**I am satisfied that the Safeguard Rules as amended are consistent with safeguard outcome (c): that net safeguard emissions decline to (i) no more than 100 million tonnes of carbon dioxide equivalence for the financial year beginning on 1 July 2029; and (ii) zero for any financial year to begin after 30 June 2049**

38. My Department's previous September 2023 net emissions analysis based on the Safeguard Rules as amended by the 2023 Production Variables Update forecasted that net Safeguard emissions would decline to 95.9 Mt CO<sub>2</sub>-e in 2029-30 (taking into account the reserve allowance), which is below 100 Mt CO<sub>2</sub>-e.
39. My Department has updated the net emission analysis to reflect *Australia's emissions projections 2023*, the updates described in paragraph 29 above, and the 2024 Production Variables Update. Based on these updates, net Safeguard emissions are expected to increase to 96.3 Mt CO<sub>2</sub>-e in 2029-30 (taking into account the reserve allowance), which is below 100 Mt CO<sub>2</sub>-e. The 2024 Production Variables Update contributes 0.2 Mt CO<sub>2</sub>-e to the increase, with the balance reflecting *Australia's emissions projections 2023* and the updates described in paragraph 29 above. As this is below 100 Mt CO<sub>2</sub>-e, I am satisfied that the Safeguard Rules as amended are consistent with safeguard outcome (c)(i).
40. As set out in paragraphs 37 and 38 of my reasons of 3 May 2023, the default decline rate detailed within Part 3, Division 5 of the Safeguard Rules for a financial year beginning 1 July 2030 or later is a rate that reduces to zero over the 20 years 2030-31 to 2049-50, ensuring that aggregate baselines for designated large facilities reach net zero by 2049-50. Part 3, Division 1 of the Safeguard Rules requires that baselines for facilities for a financial year that begins after 30 June 2049 must be zero. The 2024 Production Variables Update does not alter

this requirement and will not directly impact Part 3, Division 5. Having regard to Part 3 of the Safeguard Rules, I am satisfied the Safeguard Rules, as amended by the 2024 Production Variables Update, are consistent with safeguard outcome (c)(ii).

**I am satisfied that the Safeguard Rules as amended are consistent with safeguard outcome (d): that 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.**

41. Safeguard outcome (d) requires the 5-year rolling average Safeguard emissions for each financial year that begins after 30 June 2024 to be lower than the past 5-year rolling average Safeguard emissions for that financial year, where the past 5-year rolling average Safeguard emissions is defined as one fifth of the total amount of Safeguard emissions for the 5 financial years previous to the financial year that ended 3 years before the start of the current financial year (for financial years that begin before 1 July 2027), and from the 2027-28 financial year onwards, for the 5 financial years that ended 2 years before the start of the current financial year.
42. *Australia's emissions projections 2023* include projections of onsite abatement at Safeguard facilities based on the central 'progressive industry transition' scenario in modelling commissioned from RepuTex. The Department has updated the gross emissions analysis within the emissions projections to reflect revised baseline estimates as a result of the 2024 Production Variable Update. The updated analysis indicates that the 5-year rolling average Safeguard emissions for each financial year that begins after 30 June 2024 is lower than the past 5-year rolling average Safeguard emissions for that financial year (Table 1), which is consistent with outcome (d).

Table 1: Projected Safeguard gross emissions – Production Variables Update (Mt CO<sub>2</sub>-e)

FY ending	2024	2025	2026	2027	2028	2029	2030
Gross emissions	138.6	136.9	134.6	135.5	133.5	128.0	120.5
5 year rolling average	139.6	137.8	137.2	136.8	135.8	133.7	130.4
Change relative to specified period	three years prior			two years prior			
		-0.9%	-2.8%	-2.8%	-0.7%	-1.1%	-2.3%

Note that numbers in this table have been rounded to one significant figure.

43. The amendments made by the 2024 Production Variables Update will help to encourage emissions reductions in the steel sector by ensuring that baselines will not go down for the same level of production if the facility uses new low-emissions technologies. For example, by replacing blast furnace with direct reduced iron technology.

**I am satisfied the Safeguard Rules as amended take into account safeguard outcome (e): that the responsible emitter for each designated large facility has a material incentive to invest in reducing covered emissions from the operation of the facility.**

44. New facilities have the opportunity to use the latest technology and build world's best practice emissions performance into their design. As part of the reforms to the Safeguard Mechanism, the Government decided new facility baselines will be set at international best

practice, adapted for an Australian context. This sends a strong signal to investors that Australia is serious about net zero, and new investments must support this goal. The best practice EIs set in 2024 Production Variable Update will encourage investors in the mining, oil and gas, iron and steel and hydrogen sectors to take up the opportunities to achieve best practice emissions performance. Facilities that achieve covered emissions below the best practice EI can generate SMCs that can be sold to other Safeguard facilities. Facilities with emissions above the best practice EI can make up the difference by, for example, purchasing SMCs from another Safeguard facility that has outperformed its baseline.

45. The 2024 Production Variables Update amends the iron and steel sector PVs so they are technology-neutral and broadly applicable. This will provide a material incentive for facilities to take up opportunities for emissions reductions by ensuring the Safeguard baseline does not decrease if the facility invests in lower emissions production (on an emissions intensity basis). Many ways of reducing the emissions intensity of steel production involve using less coke (an intermediate product) to make the steel. Previously, facilities would get a lower baseline for reducing their coke production, which disincentivises these approaches for reducing emissions. To address this, the updated coke PV only applies to coke that is exported from the facility. The emissions associated with the production of coke oven coke that is not exported would be associated with the new primary steel PV. The emissions from on-site production of lime, iron ore pellets and iron ore sinter are similarly associated with the new primary iron and primary steel PVs, so that the baseline is not reduced if lower emissions technologies no longer require these feedstocks. Consistent with the coke oven coke PV, the lime and pellet PVs are updated to only apply to product exported from the facility. It is impractical to export sinter, so this PV is removed.
46. The updates to the steel PVs are intended to accommodate new low emissions technologies for making steel. One such technology is a process called direct reduction which be used to make direct reduced iron (DRI) and hot briquetted iron (HBI). This does not require coke (from coal) and can be done using natural gas, and potentially hydrogen. DRI and HBI can then be converted to steel using an electric arc furnace at the facility, or exported from the facility to make steel elsewhere.
47. To accommodate DRI and HBI, a primary iron PV has been created which applies to metallic iron products exported from the facility. This means that if a facility invests in this technology, it will have the flexibility to export metallic iron products or use them to make steel at the facility which is intended to allow it to manage its electric arc furnace capacity and provide the facility new options to sell its products.
48. The 2024 Production Variable Update also adds new sections to the Safeguard Rules so that if an emissions intensity determination applies to “primary steel” for a facility, it also applies (with different emissions intensities) to “primary iron” and “continuously cast carbon steel products and ingots of carbon steel (cold ferrous feed)” for that facility, even if “primary iron” and “continuously cast carbon steel products and ingots of carbon steel (cold ferrous feed)” are not historical PVs for the facility.
49. These provisions mean that an integrated steelmaking facility can export DRI or HBI iron, or export steel made using an electric arc furnace and have its baseline set as if it engaged in historical production of these products, using emissions data from its integrated steelmaking

activities. These provisions help to ensure that integrated steelmakers in Australia have a material incentive to invest in reducing covered emissions from the operation of the facility.

50. The amendments made by the 2024 Production Variables Update to the definition of rail transport are relevant for four rail PVs. The updated definition will incentivise opportunities for emissions reductions by ensuring the baseline does not decrease if the rail business invests in locomotives that do not combust fossil fuels (on an emissions intensity basis).
51. These updates to the steel and rail PVs engage safeguard outcome (e) by providing material incentives to take advantage of new opportunities for emissions reductions. They will also engage safeguard outcome (d) by making it more likely that the 5-year rolling average Safeguard emissions for each financial year that begins after 30 June 2024 will be lower than the past 5-year rolling average safeguard emissions for that financial year, to the extent that opportunities are taken up.
52. The new mine rehabilitation PV is to apply at the end of a mine's life following cessation of production, or in circumstances where rehabilitation activities go beyond business as usual such as rehabilitation of an entire pit or rehabilitation ramping up as production drops towards mine closure. As there is no clear production output of the mine rehabilitation activity, the PV is set using an energy input, with the default and best practice EI based on diesel combustion given diesel remains the primary energy input for vehicle-based operations. The baseline decline rate will create a material incentive to reduce emissions during the rehabilitation phase, though the use of lower emissions fuels and technology.
53. The 2024 Production Variables Update expands the eligibility of facilities that drop below the Safeguard coverage threshold to receive SMCs for up to 10 financial years in total. This change enables a facility to engage in a decarbonisation project that has significant lead times (e.g. up to three years), rather than being restricted to projects with no to minimal lead times after dropping below the coverage threshold. This update engages safeguard outcome (e) by providing material incentives to take advantage of new opportunities for emissions reductions. It does not engage safeguard outcome (b) or (c) because Safeguard emissions (as defined in section 7 of the NGER Act) do not include the emissions of below-threshold facilities that are eligible to receive SMCs.
54. I am satisfied that the Safeguard Rules as amended take into account safeguard outcome (e), because of the reasons outlined in paragraphs 50-53 of my 3 May 2023 statement of reasons, and because this outcome was taken into account during development of the amendments included in the 2024 Production Variables Update as described in paragraphs 43-53 above.

**I am satisfied the Safeguard Rules as amended take into account safeguard outcome (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.**

55. Currently, two categories of trade exposed facilities receive assistance to manage competitiveness issues and carbon leakage risks. These categories are 'trade exposed'



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facilities and TEBA facilities, which are defined in section 4 of the Safeguard Rules.<sup>7</sup> As provided by Part 3, Division 5, Subdivision D, of the Safeguard Rules, the responsible emitter for a facility can apply to the Clean Energy Regulator for the facility to be a TEBA facility, which will be eligible for a discounted decline rate based on a scheme impact metric.

56. The 2024 Production Variables Update adds renewable aviation kerosene, renewable diesel, gaseous hydrogen, liquefied hydrogen, primary iron, primary steel and lithium ore PVs as trade exposed in Schedule 2 of the Safeguard Rules. This means facilities that have any of these PVs as their primary PV may be able to apply to be a TEBA facility, and have their competitiveness be appropriately supported as Australia and its regions seize the opportunities of the move to a global net zero economy.


57. In making the amendments concerning renewable aviation kerosene, renewable diesel, gaseous hydrogen, liquefied hydrogen, primary iron, primary steel and lithium ore PVs in Schedule 2, I have taken into account safeguard outcome (f). For this reason, along with the reasons outlined in paragraphs 54-61 of my 3 May 2023 statement of reasons, I am satisfied the Safeguard Rules as amended take into account safeguard outcome (f).

**Other provisions**

58. I have had regard to other parts of the Safeguard Rules that support the effective operation of the Safeguard Mechanism regulatory scheme, but which do not otherwise directly relate to the safeguard outcomes. These include Parts 1, 2, 5, and 6 of the Safeguard Rules.

59. The 2024 Production Variables Update adds a new Division 7 to Part 6 of the Safeguard Rules. This Division includes an application and transitional provision that ensures that default EIs set in the 2024 Production Variables Update apply to Safeguard Mechanism baselines for the financial year 2023-24 and subsequent financial years.

For the reasons above, I, the Hon Chris Bowen MP, Minister for Climate Change and Energy, am satisfied that Safeguard Rules as amended are consistent with the safeguard outcomes in paragraphs 3(2)(b), (c) and (d), and take into account the safeguard outcomes in paragraphs 3(2)(e) and (f), of the NGER Act.

<b>Name and position</b>	Hon Chris Bowen MP, Minister for Climate Change and Energy
<b>Signature</b>	
<b>Date of decision</b>	22 April 2024

<sup>7</sup> Trade exposed facilities and TEBA facilities are eligible to access funding under the Powering the Regions Fund.