

In Confidence

Office of the Minister of Climate Change

Chair, Cabinet Environment, Energy and Climate Change Committee

Setting an electricity allocation factor for the New Zealand Aluminium Smelters Limited

Proposal

- 1 I seek Cabinet agreement to set an electricity allocation factor (EAF) for the New Zealand Aluminium Smelters Limited (NZAS) for its emission unit allocation under the New Zealand Emissions Trading Scheme (NZ ETS).

Relation to government priorities

- 2 The Government declared a climate change emergency on 2 December 2020. The Cabinet Business Committee (CBC) agreed that climate change “demands a sufficiently ambitious, urgent, and coordinated response across government to meet the scale and complexity of the challenge” [CBC-20-MIN-0097 refers].
- 3 Updating NZAS’s EAF is an operational adjustment in response to a renegotiated contract. The update will ensure accuracy for industrial allocation policy in the NZ ETS, one of the Government’s main tools for reducing greenhouse gas emissions.

Executive Summary

Setting the NZAS electricity allocation factor

NZAS receives industrial allocation for its NZ ETS costs

- 4 The NZ ETS imposes direct (emissions from aluminium smelting) and indirect (emissions from electricity consumption) costs on NZAS.
- 5 Industries that are emissions intensive and exposed to internationally competitive trade receive emission units (NZUs) from the government each year through industrial allocation. This reduces the risk of emissions leakage¹, allowing NZAS to meet its obligations to, and offset costs from, the NZ ETS.

¹Emissions pricing being so detrimental to the international competitiveness of our industries that production reduces in New Zealand and increases overseas, which could increase global emissions.

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- 6 The estimated impact of the NZ ETS on electricity prices is described as the EAF. The EAF is used to calculate NZAS's allocative baseline², which determines NZAS's annual industrial allocation. This is valued at \$97.5 million for 2021 (\$65.00 per NZU as at 30 November 2021).

NZAS and Meridian renegotiated the main contract, so its EAF needs to be updated

- 7 In January 2021, NZAS and Meridian Energy Limited (Meridian) agreed to a new price and term for their main electricity contract (the main contract).
- 8 The EAF underlying the calculation of NZAS's allocation under the NZ ETS needs to be updated so it reflects the emissions costs NZAS incurs from the main contract. An overallocation creates unfair fiscal penalties to taxpayers and other emitters. Under allocation increases the risk of emissions leakage.

A decision from Cabinet setting the NZAS electricity allocation factor is needed now

- 9 NZAS is a significant stakeholder in the NZ ETS. Updating NZAS's EAF to the recommended option will result in a large change to NZAS' unit allocation. This will likely be controversial and have considerable fiscal implications within the NZ ETS. Therefore, I consider that this matter warrants Cabinet consideration.
- 10 The Climate Change Response Act 2002 (the Act) gives the Minister of Climate Change powers to adjust allocation calculations to take account of electricity-related contracts³. NZAS is the only recipient of industrial allocation with adjusted calculations for new contracts.
- 11 A decision on an EAF for the main contract needs to be made now so that NZAS's allocative baseline for 2021 and 2022 can be set in regulations before the end of April 2022. This will allow NZAS to apply for its final allocation for 2021 and provisional allocation⁴ for 2022 within the statutory deadline of 30 April 2022.

I recommend setting the electricity allocation factor at zero

- 12 I recommend setting NZAS's EAF for the main contract at zero. This means there are no emissions costs passed on to NZAS under this contract. Should Cabinet agree to this recommendation, NZAS will not receive emission units for its electricity consumption under this contract.
- 13 NZAS and Meridian have been consulted. NZAS prefers the status quo, which in my view overestimates emissions costs and results in an overallocation of \$60 million per year to the benefit of NZAS. s 9(2)(b)(ii)

² Allocative baselines represent the amount of emissions that result per unit of production for eligible industrial activities. NZAS's allocative baseline is calculated and set in regulations annually using their electricity consumption data for the year.

³ Section 161C(4) of the Climate Change Response Act (2002).

⁴ NZAS's final allocation is calculated using its actual electricity consumption data for the year, whereas the provisional allocation is calculated using projected consumption data.

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- 14 If Cabinet agrees to the recommended EAF, it will be used for the purposes of issuing drafting instructions to the Parliamentary Counsel Office to update NZAS's allocative baselines in the Climate Change (Eligible Industrial Activities) Regulations 2010.

Review of the standard EAF

- 15 My officials are also reviewing the standard EAF, which applies to industrial allocation recipients and partially to NZAS. Earlier this year, Cabinet invited me to report back on updating the standard EAF methodology before the end of the year [ENV-21-MIN-0041].

- 16 s 9(2)(f)(iv)

Background

NZAS receives an allocation for aluminium smelting activities and its electricity component

- 17 NZAS is a mandatory participant in the NZ ETS and is required to surrender emission units for emissions from aluminium production and electricity consumption.
- 18 Producing aluminium is a highly emissions intensive and trade exposed industrial activity. In line with the intent of the industrial allocation policy, NZAS receives an allocation to reduce the risk of emissions leakage.
- 19 Consuming electricity creates emissions because some generators use thermal fuels. The cost increases to electricity associated with those emissions is represented by the EAF. The standard EAF is used in the allocative baselines for all eligible industrial activities, except producing aluminium.
- 20 NZAS pays a considerably lower electricity price than others, explained partially by its location, the contract size, and the long-term investment costs of Meridian. The terms of the contract are crucial to determine the NZAS specific EAF.

NZAS and Meridian renegotiated the main contract in January 2021

- 21 Electricity is sold to NZAS by Meridian under three mechanisms. One very large main contract, a second much smaller contract for potline four and through spot market purchases when needed.
- 22 This paper seeks to set NZAS's EAF for the main contract only. There is no change being proposed to the potline four contract and spot market purchases. The proposed change will not affect the smelter's industrial allocation for its direct emissions from aluminium production.
- 23 In January 2021, NZAS and Meridian renegotiated the main contract. Through the process stated in s161D of the Act, NZAS was required to provide its main contract to the Ministry for the Environment. The changes to the terms are:
- 23.1 The term of the main contract is much shorter now, expiring on 31 December 2024. The 2015 contract was intended to end in 2030.

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- 23.2 The electricity price in the main contract is a substantial decrease from the 2015 contract price.
- 23.3 The main contract electricity price is fixed for the duration of the contract, whereas the 2015 electricity price could change depending on global aluminium prices and the Consumer Price Index.
- 24 The purpose of setting this EAF for the main contract is to ensure NZAS's allocation reflects actual NZ ETS costs, avoiding overallocation and under allocation that would create unfair costs to taxpayers and increase the risk of emission leakage respectively.

Analysis

Setting the electricity allocation factor for NZAS

- 25 I have considered two possible values that reflect the NZ ETS costs incurred by NZAS for electricity use under the main contract. I have not considered the standard EAF value used for other industries as this does not reflect the material differences of size, price and contract terms between NZAS and other industrial consumers of electricity from the market.
- 26 The two options assessed are:

Option	Fiscal impact	Preferences
<p>1. Modelled EAF 0.0 tCO₂-e/MWh</p> <p>This is the modelled value EAF for NZAS from an independent expert</p>	<p>Positive fiscal impact per year (2021 - 24):</p> <p>A reduction of approximately \$60 million in expense and a reduction of \$60 million in ETS liability</p>	<p>My recommendation, noting the observed lower contract price in contradiction with the trends of increasing emissions prices</p>
<p>2. Status quo EAF 0.206 tCO₂-e/MWh</p> <p>This is the EAF for the 2015 main contract</p>	<p>Fiscal impact from forecast: \$0</p>	<p>NZAS preference, rationale set out below</p>

The modelled EAF indicates the contract price has no carbon costs

- 27 An independent expert developed a model to estimate an accurate EAF for the renegotiated contract. The model is based on the impacts to the electricity market and on Meridian's overall profitability if NZAS had closed in August 2021.
- 28 The modelling demonstrated that emissions pricing had no impact on the price of the main contract. As I have noted above, the decrease in the contract price is at odds with the trend of increasing emissions and electricity market prices.

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NZAS's prefers the status quo EAF

- 29 NZAS prefers no change to the EAF and is not in favour of the modelled value. Four main arguments were put forward: using a modelled value would be inconsistent with past approaches; the modeller overestimates the impact of the ETS on electricity contracts; it is not appropriate to model such a complex system; and Meridian stated to NZAS that the standard EAF should apply.
- 30 None of those arguments hold ground in my view. Accuracy is more important than consistency with past methods. NZAS did not offer evidence or technical arguments against the assumptions or the modelling.
- 31 **s 9(2)(b)(ii)** This position is supported by the disconnect between the low main contract strike price and increasing price trends in emission unit and wholesale electricity markets.

Review of the standard EAF

- 32 The standard EAF, which applies to all industrial allocation recipients, including partially to NZAS, was set in 2012 and is out-of-date. Given this, a review of the standard EAF methodology and value is underway.
- 33 Earlier in the year, MfE consulted on options to update the methodology for the standard EAF. This included the current modelling approach and a new method which assesses the actual, historic impact of the NZ ETS on wholesale electricity prices.
- 34 Consultation and engagement produced different EAF methodologies and values. Officials are considering this analysis and expect to provide advice to me on this early next year.
- 35 Decisions on the standard EAF methodology have different considerations than the NZAS EAF. This means the Government cannot directly apply the preferred methodology described in this paper for NZAS to set the standard EAF – although elements of the NZAS work may inform the calculation of the standard EAF in the future.

36 **s 9(2)(f)(iv)**

Financial Implications

- 37 The current fiscal forecast is based on the use of the 2015 main contract EAF of 0.206 tCO₂-e/MWh.
- 38 The recommended option replaces the main contract EAF with a new factor of 0.0 tCO₂-e/MWh. This change results in a decrease of approximately 934,400 emission units per year allocated to NZAS from the start of the contract in early 2021 to the end of 2024.

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- 39 A reduction of NZAS's allocation against the forecast for 2022/23 to 2024/25 could increase the number of units the Government can auction from 2023⁵, subject to Cabinet decisions on ETS settings next year. Auctioning raises revenue for the Crown. At current emission unit prices, this volume of units represents approximately \$60 million per financial year.
- 40 The reduction in NZAS's allocation for 2020/21 and 2021/22 will not impact the number of units that can be auctioned in 2022. The Act prevents the Minister from making such changes to ETS settings in consecutive years to protect investment and regulatory certainty.

Legislative Implications

- 41 There are no direct legislative implications from the decision to set the EAF in this paper. The decision on the EAF will be used to calculate NZAS's final 2021 allocative baseline and provisional 2022 allocative baseline. These are implemented through amendment to the Climate Change (Eligible Industrial Activities) Regulations 2010 once NZAS provides data on electricity consumption for the year.
- 42 While issuing drafting instructions for this amendment is a routine matter and I will not bring this to Cabinet for approval, I will seek Cabinet agreement to the final amendments before the end of March 2022.

Impact Analysis

Regulatory Impact Statement

- 43 The Regulatory Impact Analysis Panel at the Ministry for the Environment has reviewed this Regulatory Impact Statement and considers it meets the quality assurance criteria for Regulatory Impact Assessments.
- 44 The Regulatory Impact Statement (RIS) clearly sets out the problem definition and case for change, provides robust analysis of a range of viable options, is supported by consultation with the affected parties, and adequately quantifies the impacts on those parties. The panel supports the proposed proactive release of the modelling report that underpins the analysis, to promote transparency of decision making.
- 45 A RIS has been completed and is attached in the Appendix.

Climate Implications of Policy Assessment

- 46 The Climate Implications of Policy Assessment (CIPA) team has been consulted and confirms that the CIPA requirement does not apply to this proposal as there is no direct impact on emissions.
- 47 While this proposal covers one of New Zealand's largest consumers of electricity and the NZ ETS cost passed through it, it will not have any direct impact on emissions from NZAS or other firms. The objective of this proposal is to determine and set the

⁵ The Government has already set the 2022 auction budget and cannot make changes. However, there may be some discretion to change the auction volumes for 2023 if units become available from reduction in allocation. These units can be auctioned because the reformed NZ ETS places a cap on the supply of units. Both allocation and auctions are part of the current methodology for cap setting.

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correct electricity emissions factor by which to allocate NZAS NZUs under the NZ ETS. It does not intend to change the electricity consumption or aluminium production of the firm, nor the electricity supply options for Meridian.

- 48 There could be an indirect impact on the market price of emission units as the reduction in allocation could allow more to be auctioned. This potential indirect impact is difficult to predict with certainty but is unlikely to be significant.

Te Tiriti o Waitangi Implications

- 49 Māori have a significant stake in climate change action and the NZ ETS. There are no direct Te Tiriti o Waitangi implications from this EAF change. I have been mindful of the fundamental purpose of industrial allocation, being to mitigate against the risk of a loss in domestic production, with the local economic and societal impacts this would bring to a region such as Southland.
- 50 The Ministry of Business, Innovation and Employment (MBIE) are facilitating Southland's transition away from NZAS in partnership with Ngāi Tahu. There are no impacts from this change on MBIE's partnership with Ngāi Tahu or the transition work in Southland.

Human Rights

- 51 There are no inconsistencies between the proposal and the Human Rights Act 1993.

Consultation

- 52 NZAS was consulted on options for the EAF value for the main contract. Meridian was also consulted.
- 53 The Treasury, MBIE, Environmental Protection Authority, Ministry for Primary Industries, and Ministry for Foreign Affairs and Trade have also been consulted on the proposals set out in this paper. The Department of the Prime Minister and Cabinet has been informed of the proposals in this paper. No issues were raised through consultation.

Proactive Release

- 54 I propose this Cabinet paper be proactively released subject to any material being withheld in accordance with the Official Information Act 1982. NZAS and Meridian will be consulted prior the proactive release.

Recommendations

The Minister of Climate Change recommends that the Committee:

1. **Note** that New Zealand Aluminium Smelters Limited (NZAS) receives one of the largest allocations of emission units under industrial allocation policy in the New Zealand Emissions Trading Scheme (NZ ETS).
2. **Note** the purpose of industrial allocation policy is to reduce the risk that emissions pricing is so detrimental to the international competitiveness of some of our industries

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that production reduces here and increases overseas, which could increase global emissions.

3. **Note** firms in the NZ ETS incur emissions costs when they consume electricity purchased from the wholesale spot market, as measured by the electricity allocation factor.
4. **Note** that on 14 January 2021 NZAS and Meridian Energy Ltd announced they had renegotiated the main electricity contract.
5. **Note** Section 161C(4) of the Climate Change Response Act (2002) allows the Minister to recommend changes to allocation settings for persons with electricity related contracts such as NZAS.
6. **Agree** to set NZAS's electricity allocation factor to 0.0 tCO₂-e/MWh for the electricity consumed under the main contract from 14 January 2021 until the contract expires or is materially amended.

Yes/No

7. **Note** that this setting reflects my conclusion that NZAS faces no emissions costs for electricity consumed under the main contract.
8. **Note** this change will reduce the number of units allocated to NZAS for 2021 and 2022. This will have a positive fiscal impact on the Crown's operating balance.
9. **Note** this decision could allow an increase in emission units to be auctioned from 1 January 2023, subject to further Cabinet decisions in 2022 on ETS settings, as well as forcing a reduction in the stockpile of privately held emission units for 2021 and 2022.
10. **Note** the Minister of Climate Change will issue drafting instructions to amend the Climate Change (Eligible Industrial Activities) Regulations 2010 regulations to update NZAS' annual allocative baseline to reflect the new electricity contract.
11. **Invite** the Minister back to Cabinet on those amendment regulations in March 2022.
12. **Agree** that this Cabinet paper be proactively released, subject to any material being withheld in accordance with the Official Information Act 1982.

Yes/No

13. **Note** a review of the standard EAF methodology and value is underway.

14. s 9(2)(f)(iv)

Authorised for lodgement

Hon James Shaw
Minister of Climate Change

Proactively released

**Appendices: Regulatory Impact Statement: Setting an Electricity Allocation
Factor for the New Zealand Aluminium Smelters Limited**

Proactively released