

# Regulatory Impact Statement

## **New Zealand Emissions Trading Scheme: Industrial allocation**

Some of the content of this document has been deleted where the information is either commercially sensitive or legally privileged. Deletions and the reason are shown with the text '[Deleted – reason for the deletion]'.

### **Agency Disclosure Statement**

This Regulatory Impact Statement has been prepared by the Ministry for the Environment. It provides an analysis of the options available to the Minister for Climate Change Issues when exercising his discretion in terms of recommending regulations to prescribe eligible industrial activities for the allocation of New Zealand emissions units under Section 161A of the Climate Change Response Act 2002 (the Act). The Minister may recommend the making of regulations to prescribe eligible industrial activities and other matters as appropriate including:

- i. the description of the activity;
- ii. whether the activity is highly emissions intensive or moderately emissions intensive
- iii. the products to be used as the basis for allocation;
- iv. the methodologies to be used for calculating the amount of each product;
- v. for each product, one or more allocative baselines
- vi. the allocation factors for electricity and natural gas feedstock;
- vii. the information that must be kept for verification purposes; and
- viii. the adjustment to allocative baselines to reflect the impact of electricity related contracts.

Cabinet has previously decided that an intensity based approach to free allocation of emissions units should be used to provide assistance to firms most impacted by the implementation of the New Zealand Emissions Trading Scheme (NZ ETS). This framework was incorporated into the Act in December 2009. The proposed regulations implement this framework.

The Act (Section 161A(3)) requires that before recommending that regulations be made prescribing eligible industrial activities for the purposes of allocation of New Zealand units, the Minister must be satisfied that the activity is moderately emissions intensive or highly emissions intensive and trade exposed; or the activity is an Australian eligible industrial activity.

The Ministry published a public consultation document on the development of industrial allocation regulations in December 2009. Section 161D of the Act provides for a process whereby the Minister may issue notices calling for information for the purposes of

proposed allocation to industry. Section 161F sets out consultation requirements before the Minister notifies an activity in the Gazette calling for information. All of the activities proposed to be prescribed as eligible industrial activities have been subject to calls for information with extensive direct consultation on these matters. This has allowed the Minister to make a detailed assessment of the available options.

The proposed regulations will allow firms who carry out the prescribed eligible industrial activities to apply for a free allocation of New Zealand emissions units. This will reduce the net cost increase resulting from the NZ ETS. Compliance costs are voluntary as firms can choose whether to apply for an allocation and are, in any case, likely to be minimal. The potential impacts on business investment and market competition have been considered under the various options available where this is relevant. The risks of these impacts are minimised or removed in the preferred policy options. The preferred policy proposals do not override fundamental common law principles.

Stuart Calman, Director

Signature:

Date:

## Status quo and problem definition

### **Status Quo**

1. The Climate Change Response Act 2002 (the Act) established the New Zealand Emissions Trading Scheme (NZ ETS). The key purpose of the NZ ETS is to enable New Zealand to comply with its international obligations under the Kyoto Protocol and the United Nations Framework Convention on Climate Change (UNFCCC).
2. Under the NZ ETS, some firms will have a legal obligation to surrender emissions units to cover their direct greenhouse gas emissions or the emissions associated with their products. To do this, firms will first need to acquire emissions units and this will effectively put a price on greenhouse gas emissions.
3. From 1 July 2010, the stationary energy, industrial process (SEIP) and liquid fossil fuels (LFF) sectors will be obliged to surrender emissions units. The Act places the obligation high up the supply chain to minimise the administrative costs of the ETS while maximising greenhouse gas emissions coverage. This means large fuel importers and coal and gas miners and certain businesses undertaking industrial processes will have to purchase emissions units to cover their greenhouse gas emissions.
4. Some firms may face a large increase in their fuel and energy costs if they are emissions-intensive that is, they produce a large amount of greenhouse gas emissions and/or use large amount of energy to produce their products relative to the revenue generated from sales of those products. In many cases this cost is expected to be passed on to customers through higher prices. However, some firms may be trade exposed, such that they are unable to pass on this increase in costs to their customers in the light of competing firms that do not face a comparable cost on emissions in their home countries.
5. Cabinet has previously decided that assistance in the form of a free allocation of emissions units would be targeted at those firms most impacted by the introduction of a price on emissions, that is emissions intensive and trade exposed (EITE) firms. Cabinet has agreed to adopt an intensity-based approach to free allocation to EITE industries with certain design features, such as:<sup>1</sup>
  - Eligible activities will be required to meet the trade exposed and emissions intensive tests;
  - Allocation will be based on industry average emissions-intensity for each activity; and
  - Industrial allocation should only be provided for emissions from coal, natural gas, geothermal fluid, used oil, waste oil, steam generation and electricity.<sup>2</sup>

These design features were enacted through the Climate Change Response (Moderated Emissions Trading) Amendment Act 2009.

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<sup>1</sup> Cabinet Minute of Decision, CAB Min (09)33/9, paragraph 13. See: <http://www.mfe.govt.nz/cabinet-papers/topics/advice-on-a-moderated-nz-ets.html>

<sup>2</sup> Cabinet agreed that industrial allocation should be provided for emissions from liquid fossil fuels if an activity's eligibility is based on eligibility in Australia. However, this approach for developing regulations is not applicable at this time.

6. The Act (Section 161A(3)) requires that before recommending that regulations be made prescribing eligible industrial activities for the purposes of allocation of New Zealand emissions units, the Minister must be satisfied that the activity is moderately emissions intensive or highly emissions intensive and trade exposed; or the activity is an Australian eligible industrial activity.
7. The Act sets out an intensity-based approach to allocation to eligible firms with the following features:
  - the principles governing how activities should be described (Section 161E(1));
  - a test for determining whether an activity is trade exposed (Section 161C(1)(c));
  - a formula for determining an activity's emissions intensity, in terms of the total activity emissions per \$1million of revenue<sup>3</sup> (Section 161C(1)(a) and (b));
  - emissions intensity thresholds for determining which activities are eligible for assistance and the level of emissions intensity (either moderately or highly emissions-intensive) (Section 161C(1)(a) and (b));
  - based on these thresholds, the level of assistance a firm carrying out an eligible activity can receive (initially set at 90% of their required emissions units for highly emissions-intensive activities and 60% for moderately emissions-intensive activities) (Sections 81 and 83);
  - how much the level of assistance will be reduced by each year beginning in 2013 (i.e. 1.3 per cent per annum) (Sections 81 and 83);
  - a formula for calculating the allocative baseline, that is, the amount of emissions per unit of activity output<sup>4</sup> (Section 161C(2));
  - a formula for determining a firm's provisional allocation entitlement for the eligible activity (Section 81); and
  - a formula for determining a firm's annual allocation adjustment to its provisional allocation (Section 83).
8. The Act provides for a transition phase from 1 July 2010 to 31 December 2012, whereby firms are required to surrender only one emissions unit for every two tonnes of emissions. In addition, firms can purchase emissions units from the Crown at a fixed price of \$25 per unit. This means the effective maximum price for each tonne of emissions during the transition phase is \$12.50.
9. The Minister has used his power under Section 161D of the Act to issue notices in the New Zealand *Gazette* requesting information necessary to determine whether to prescribe and activity as an eligible industrial activity, including to determine:
  - whether the activity is highly or moderately emissions intensive; and
  - information to assist with determining the allocative baseline for each product of that activity.

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<sup>3</sup> This is on an industry average basis rather than firm or site specific.

<sup>4</sup> This is on an industry average basis rather than firm or site specific.

10. There are other existing government interventions that provide help to firms. EECA offers a range of support to firms to improve energy efficiency which will reduce the cost impact of the NZ ETS. For example, it provides grants to firms to make energy saving investments. However, these schemes are not targeted at firms most affected by the introduction of the NZ ETS.
11. In the status quo, it is assumed that surrender obligations for the SEIP and LFF sectors begin on 1 July 2010 and there is a transition phase. During this phase, firms face a (maximum) price of \$12.50 per each tonne of emissions and have varying abilities to pass-on its increase in costs (depending on the degree of trade exposure). In addition, other government interventions, such as EECA grants to improve energy efficiency, are available to firms. Given that the Act provides for industrial allocation then in the status quo it is assumed that regulations allowing free allocation of New Zealand emissions units to EITE firms on an intensity basis are made.

### **Problems to be solved**

12. The Act (Section 161A) gives the Minister the power to recommend the making of regulations prescribing eligible industrial activities which will enable firms engaged in these activities to apply for an allocation of New Zealand emissions units.
13. As the intensity-based allocation approach has already been determined then this has not been revisited through the regulation making process.<sup>5</sup> As a result, the Ministry has focussed its analysis on how to implement the regulations. This has meant focussing on those matters that may be included within the proposed regulations where the Minister has discretion when recommending the making of regulations. Under the Act, the Minister has discretion on the following matters:
  - the description of the activity (Section 161A);
  - the products to be used as the basis for an allocation (Section 161A);
  - the methodology or methodologies for calculating the amount of each prescribed product (Section 161A);
  - the allocation factor(s) for electricity and natural gas feedstock (Section 161A);
  - the information that must be kept for verification purposes Section 161A); and
  - the adjustment to allocative baselines to reflect the impact of electricity related contracts (Section 161C(4)).
14. This Regulatory Impact Statement (RIS) focuses on the options available in relation to these matters. Regulations will be made in tranches. This RIS relates to the activities covered in the first tranche. Separate RISs will be provided for future tranches.

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<sup>5</sup> The impacts of introducing allocation and other policy proposals were considered in the Regulatory Impact Statement provided with the previous cabinet paper: *Moderated Emissions Trading Scheme: Amendments to the Climate Change Response Act 2002*. The cabinet paper is available at this link: <http://www.mfe.govt.nz/cabinet-papers/cab-paper-moderated-emissions-trading-scheme-proposed-amendments-to-the-climate-change-response-act-2002.pdf>  
The Regulatory Impact Statement is available at this link: [http://www.legislation.govt.nz/bill/government/2009/0085/latest/viewpdf.aspx?search=ts\\_bill\\_climate\\_noresel&p=1](http://www.legislation.govt.nz/bill/government/2009/0085/latest/viewpdf.aspx?search=ts_bill_climate_noresel&p=1)

## Objectives

15. There are two overarching policy objectives:

- Reduce the risk of competitiveness impacts on domestic firms most at risk under the NZ ETS. Related to this overarching objective are two inter-related objectives:
  - Reduce the risk of New Zealand firms reducing domestic production and allowing for the expansion of production; and
  - Reduce the risk of emissions leakage.
- Ensure a smooth transition to a low carbon economy by reducing economic disruption (e.g. distorting investment decisions). Related to this overarching objective are three sub-objectives:
  - Provide firms with certainty of the cost impact of the NZ ETS on the SEIP and LFF sectors as the surrender obligations comes into force (i.e. 1 July 2010);
  - Minimise administration costs; and
  - Minimise firms' compliance costs.

## Regulatory impact analysis

### ***Description of the activity and the products to be used as the basis for an allocation***

16. The description of the eligible industrial activity, including the start and end points (i.e. the boundaries) of the activity, determines the emissions that are included and excluded. This will determine whether the activity meets the eligibility requirements for an allocation and, if so, the level of assistance and allocative baseline. This, in turn will determine which firms are eligible for an allocation and how much allocation they are entitled to.
17. Under the Act (Section 161E(1)), the Minister must have regard to a number of matters when defining activities before issuing a notice requiring information for the purposes of allocation in the *New Zealand Gazette*. These matters are listed in Annex A.
18. In this assessment, the Ministry has had to weight the various matters to reach a conclusion. The matters which the Ministry has attached the greatest weight to are:
- Activity definitions should be consistent and equitable across industries;
  - The impacts on business investment, geographic location and the structure of the activities; and
  - The activity definitions used in Australia.
19. In December 2009, the Ministry published, *Development of Industrial Allocation Regulations under the New Zealand Emissions Trading Scheme: Consultation Document* (the Consultation Document).<sup>6</sup> The Consultation Document proposed activity descriptions and the products to be used as the basis for allocation.<sup>7</sup> Consistent with Cabinet's initial focus on reducing trans-Tasman competitiveness risks, these were

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<sup>6</sup> See: <http://www.mfe.govt.nz/publications/climate/development-industrial-allocation-regulation-ets/index.html>

<sup>7</sup> See Annex 1: <http://www.mfe.govt.nz/publications/climate/development-industrial-allocation-regulation-ets/index.html>

based on activity definitions used in Australia for activities that had either been found to be eligible or were under consideration for eligibility. Stakeholders were also invited to nominate additional activities potentially eligible.

20. The Ministry has published activity analyses (the Activity Analyses) for each activity which sets out its assessment against each of the matters the Minister must have regard to and its recommendation to the Minister following consultation with stakeholders.<sup>8</sup>
21. For some of the proposed activities and products, stakeholders did not suggest any substantive changes to the proposals during the consultation. Therefore it was not necessary for the Ministry to consider alternative hypothetical options and their potential impacts. This was the case for the following activities:
  - Aluminium smelting;
  - Production of burnt lime;
  - Production of chlorine gas and caustic soda;
  - Production of high purity ethanol;
  - Production of hydrogen peroxide;
  - Production of methanol;
  - Production of newsprint; and
  - Production of tissue paper.
22. For other proposed activities and products, stakeholders suggested significant changes to the proposals during the consultation. The Ministry assessed these alternative proposals against the matters the Minister must have regard to under the Act and considered potential impacts for the different options. The Activity Analyses sets out the Ministry's assessment and its conclusions.<sup>9</sup> This was the case for the following activities: the production of carbamide (urea), the production of market pulp and some of the paper activities, (i.e. the production of cartonboard and the production of packaging and industrial paper). These are considered in more detail below.

### ***Production of carbamide (urea)***

23. There are two options for the treatment of ammonia production and urea production: specifying ammonia production and urea production as separate activities, or specifying ammonia-urea production as a single, integrated activity. Both options are broadly consistent with the matters the Minister must have regards to under the Act (as set out above). However, a number of other matters are also relevant in determining how ammonia and urea production should be treated, in particular:
  - Impacts on production costs;
  - Impact on competitiveness;
  - Impact on compliance costs; and

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<sup>8</sup> See: <http://www.climatechange.govt.nz/consultation/submissions-industrial-allocation/index.html#activity>

<sup>9</sup> See Section 2: <http://www.mfe.govt.nz/publications/climate/industrial-allocation-submissions-summary/index.html>

- Future proofing.

24. **[Deleted – commercially sensitive]**
25. Given bulk ammonia is not tradable,<sup>10</sup> and ammonia and urea are only produced through an integrated process in New Zealand, the competitiveness of ammonia is dependent on urea production and vice versa. **[Deleted – commercially sensitive]**
26. With separate activity descriptions, it would be necessary to collect separate data on emissions and revenue for each activity. This would require apportioning emissions from facilities that are shared between the two activities. This would increase one-off compliance costs associated with data collection, compared to an integrated activity description. Given that applications for industrial allocation are based on production data, on-going compliance costs are roughly the same for both options. As a result, this is not sufficient to determine whether integrated or separate activity definitions should apply.
27. Separate activity descriptions would better cater for stand-alone ammonia or urea production in the future. However, the New Zealand Centre for Advanced Engineering has advised that there is a low likelihood of this arising in the medium term. If necessary, regulations could be amended in the future to cater for stand-alone production. The Act requires the Minister to conduct regular reviews of the NZ ETS, the first will be in 2011 and will occur every five years thereafter.
28. **[Deleted – commercially sensitive]** In addition, there would be moderate reductions in compliance costs. The Ministry recommends that ammonia-urea production should be treated as a single, integrated activity.

### ***Production of market pulp***

29. Most of New Zealand's pulp production is sold as market pulp (principally for export). A relatively small proportion of the pulp is used as an intermediate product in the production of paper products. In contrast, only one type of dry pulp is produced in Australia, and it is primarily produced as an intermediate product in the production of paper.
30. Three different categories of pulp have been identified in the New Zealand market: low yield pulp<sup>11</sup>, high yield pulp<sup>12</sup> with low freeness<sup>13</sup> and high yield pulp with high freeness<sup>14</sup>. These products require different amounts of energy to produce. Low yield

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10 If ammonia was tradable then an integrated ammonia-urea activity definition would not be consistent with the matters the Minister has to have regard to (as listed above). In particular, (i) activities should not be defined by reference to technology employed, the fuel used, the age of the plant, or the quality of the types of feedstock used; (ii) activity definitions should take into account the impact that definitions may have on business investment, geographical location, and the structure of activities; and (iii) activities should be defined in a way that takes into account the potential for intermediate inputs produced when the activity is carried out to be substituted for bought-in inputs.

<sup>11</sup> Low yield pulp is commonly referred to as chemical pulp and has been defined in the *Gazette Notice* as being pulp with a fibre recovery less than or equal to 80% by mass on dry (BD) wood chip input.

<sup>12</sup> High yield pulp has been defined in the *Gazette Notice* as being pulp with a fibre recovery greater than 80% by mass on dry (BD) wood chip input.

<sup>13</sup> 'Freeness' is a term used to describe the strength of paper, where the lower the Canadian Standard Freeness (CSF) value, the weaker the pulp. Low freeness pulp has been defined in the *Gazette Notice* as being pulp with a CSF of less than 150ml.

<sup>14</sup> High freeness pulp has been defined in the *Gazette Notice* as being pulp with a CSF of more than 150ml.

pulp is considered to be moderately energy intensive and high yield pulps are considered to be highly emissions intensive. According to the industry, the three products have different properties and end uses but there also appears to be a degree of substitutability between these products.

31. There are three options available to accommodate the production of market pulp in New Zealand:

1. Maintain the activity definition as presented in the Consultation Document, with one activity definition and associated allocative baseline.
2. Alter the activity definition as presented in the Consultation Document to have three allocative baselines (one for each type of pulp) under the one pulp activity definition.
3. Prepare three activity definitions, each with their own allocative baseline.

All three options are broadly consistent with the matters the Minister must have regard to under the Act. It is noted that option 1 does not accurately reflect New Zealand’s market structure and therefore changes to the activity definition should be considered. For this activity, the matter of having regard to the definition used in Australia has a lower weighting.

32. In determining between the three options, officials considered the following impacts: costs to firms, distortion of competition within the domestic market and incentives for investment. These are the three matters weighted most highly.

33. Table 1 below shows the impact on costs as a proportion of production prices.

**Table 1: Estimated cost impact for the three options for market pulp<sup>15</sup>**

Option	Eligibility	Allocation	Cost as a percentage of product price	
			Low Yield Producer	High Yield Producers
Option 1	Single activity	Single baseline	[Deleted – commercially sensitive]	[Deleted – commercially sensitive]
Option 2	Single activity	Three baselines	[Deleted – commercially sensitive]	[Deleted – commercially sensitive]
Option 3	Three activities	Three baselines	[Deleted – commercially sensitive]	[Deleted – commercially sensitive]

34. In option 1, it is expected the whole industry would be highly emissions intensive. However, high yield pulp producers would see a higher increase in their costs compared to the other options, while low yield pulp producers would make a windfall gain.<sup>16</sup> Given that there is a degree of substitutability between the three pulp types, this could result in a distortion of the domestic market, as producers of low yield pulp could produce at a lower cost than high yield pulp producers. Officials consider the risk of a distortion to be

<sup>15</sup> Ministry for the Environment calculations based on industry data. These estimates are based on an emissions unit price of \$50.

<sup>16</sup> This is because low yield pulp production is considered to be a moderately emissions intensive activity. This means that the allocative baseline under option 1 is lower for high yield pulp production and is higher for low yield pulp production, compared to options 2 and 3 where separate allocative baselines are calculated for each type of pulp.

high and the potential impact on firms to be significant. As such, officials consider this option is at a significant disadvantage relative to the other options.

35. Option 3 could theoretically result in distortion of investment incentives for new firms entering the market. This is because high yield pulp production (both low and high freeness) would be considered highly emissions intensive, while low yield pulp would be considered moderately emissions intensive. Therefore, it could be considered advantageous to receive a higher level of allocation and produce a high yield pulp, rather than invest in the production of low yield pulp, which will only receive a moderate level of allocation. However, the industry has indicated there is a low likelihood of new entry, therefore officials consider the risk of market distortion in option 3 is low.
36. With separate activity descriptions (option 3) and/or products (options 2 and 3), it would be necessary to collect separate data on emissions and revenue for each activity. For two of the firms, this would require apportioning emissions from facilities that are shared between the two activities. This would increase one-off compliance costs associated with data collection, compared to an integrated activity description. Given that applications for industrial allocation are based on production data, on-going compliance costs are roughly the same for all three options. As a result, this is not sufficient to determine which option should apply.
37. On balance, option 2 is considered the best option, and also happens to be preferred by submitters. This option ensures levels of allocation reflect the different emissions intensities of the different types of pulp, but also that no producer is significantly disadvantaged in relation to its competition. It also strikes a balance between representing the market structure in New Zealand and keeping the activity definition as close to that used in the proposed Australian CPRS. Deleted – legally privileged

#### ***Treatment of inputs to market pulp and some paper activities***

38. The proposed activity description specified the inputs for market pulp and some paper activities (i.e. cartonboard, and packaging and industrial paper) as wood chips, sawdust, wood pulp and/or recovered paper. The majority of producers of these products requested the activity definition for their respective products be expanded to include logs as an input.
39. This amendment was not made to the activity description on the basis that the inclusion of logs as an input is inconsistent with the matters the Minister must have regards to under the Act. Specifically, having logs as an input would include the process of making wood chips, which are considered to be an intermediate product that can be substituted for bought-in inputs (Section 161E(1)(c)(ii)). Also, the proposed activity definition under the proposed Australian CPRS does not include logs as an input to any of these processes (Section 161E(1)(e)). Further, the exclusion of logs as an input is consistent with the treatment of intermediate products in other activity definitions (Section 161E(1)(c)).
40. The sole producer of cartonboard also requested the cartonboard definition be expanded to include log billets as an input. The production of cartonboard involves a step where ground wood pulp is made directly from log billets. There is no saleable intermediate product (such as wood chips). Therefore, the proposed activity description was modified to accommodate this input. This is also consistent with other activities which began with the first tradable input.

#### ***Methodologies for calculating the amount of each product***

41. The regulations can include methodologies for calculating the amount of each product. In the calls for data published in the New Zealand *Gazette*, the Minister specified two

methods for calculating output, either direct measurement or sales and changes in inventory.<sup>17</sup> In terms of the regulations, there are a number of options available:

1. Specify the same methodologies as those in the New Zealand Gazette notices;
  2. Specify different/additional methodologies;
  3. Not specify any methodologies; or
  4. Specify a preference for the same methodologies as those in the New Zealand Gazette notices but allow other accurate methods to be used if the preferred methods are not feasible.
42. Option 1 would ensure consistency with the approach adopted in the New Zealand *Gazette* notices. However, this would restrict firms from using other acceptable methodologies.<sup>18</sup> Similarly, with option 2, there is a risk that the regulations do not specify all acceptable methodologies. Without detailed technical knowledge of the processes and measurement set-up at the different facilities, it will be difficult to determine in advance whether there are superior alternatives to direct measurement or sales and changes in inventory. For example, for activities where there are multiple products in vertically integrated processes, e.g. carbon steel, one appropriate approach may require factors to be developed based on back calculations from the recorded production of a downstream product, rather than direct measurement of each product.
43. Option 3 provides flexibility to use a method that is most appropriate to the particular product. However, this flexibility could also create uncertainty for firms and entails a risk of increasing costs as firms seek to mitigate their potential exposure from choosing a method subsequently deemed unacceptable.
44. The preferred option is option 4. This is because it specifies a preference for the two most accurate and commonly used measurement methods: direct measurement and sales and changes to inventory, consistent with the *Gazette* notices. However, it also provides flexibility for other accurate methods to be used if the preferred methods are not feasible.

### ***Allocation factors for electricity and natural gas feedstock***

45. The NZ ETS will increase the costs of generating electricity from fossil fuels and geothermal sources, which is likely to be passed on to customers through higher prices. This means that a number of energy intensive firms will face higher costs of production because of the electricity used in their production processes. Industrial allocation will reflect the increase in electricity costs. In 2008, the Stationary Energy and Industrial Process Technical Advisory Group estimated the expected increase in electricity prices as result of the introduction of the NZ ETS. This was used to derive an electricity allocation factor (EAF) of 0.52 tonnes of CO<sub>2</sub> equivalent emissions per megawatt hour of electricity. The Consultation Document proposed that this factor be used to determine the allocative baselines for industrial allocation under the NZ ETS.
46. During the consultation, a number of stakeholders argued that the EAF was too low. One argued it was too high. The Ministry assessed these arguments; this assessment is set

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17 This was specified in the Gazette notices in revenue rule two.

18 When making an application for an allocation, firms have to declare that the data provided is correct. Whilst a firm could make a false declaration if it had used an inappropriate methodology this would be subject to audit and potentially penalties. See the *Implementation* section below..

out in the Summary of Submissions.<sup>19</sup> The calls for data published in the *New Zealand Gazette* subsequently required a factor of 0.52 tonnes of CO<sub>2</sub> equivalent emissions per megawatt hour to be used to calculate allocative baseline. The preferred option is that an EAF of 0.52 tonne of CO<sub>2</sub> equivalent emissions per megawatt hour is prescribed in the regulations as this is sufficiently robust approach for determining allocative baselines in the short term.

47. A different EAF has been used to calculate emissions intensity for the purpose of determining eligibility. The Consultation Document proposed an EAF of 1 tonne of CO<sub>2</sub> equivalent emissions per megawatt hour. This factor is the same as the factor that was to be used under the proposed Australian Carbon Pollution Scheme. This option is intended to help ensure comparability between activities receiving assistance in Australia and New Zealand. All submitters, except one, supported this approach.<sup>20</sup>
48. If a lower EAF was adopted in New Zealand then this could create a potential distortion between and an inequitable treatment of eligible activities in New Zealand. This is because the Act provides for two tracks under which an activity can be deemed eligible for an allocation. Under the New Zealand track, activities not defined as eligible in Australia could be defined as eligible here. Under the Australian track, an activity found to be eligible in Australia would be eligible in New Zealand. In Australia, it is proposed that eligible activities will be determined using an EAF of 1 tonne of CO<sub>2</sub> equivalent emissions per megawatt hour. These activities will also be eligible in New Zealand under the Australian track based on this higher EAF. However, those New Zealand activities eligible under the New Zealand track would be based on a lower EAF. Adopting an EAF of 1 tonne of CO<sub>2</sub> equivalent emissions per megawatt hour would ensure comparability between the two tracks.<sup>21</sup>
49. The calls for data published in the *New Zealand Gazette* subsequently required a factor of 1 tonne of CO<sub>2</sub> equivalent emissions per megawatt hour to be used to calculate emissions intensity for eligibility purposes. The preferred option is that an EAF of 1 tonne of CO<sub>2</sub> equivalent emissions per megawatt hour for eligibility purposes is prescribed in regulations to ensure consistency with the proposed Australian scheme.
50. Upstream natural gas emissions are not an emissions source eligible for industrial allocation. As a result, it is not necessary for the Minister to recommend a natural gas feedstock allocation factor for inclusion in the regulations.<sup>22</sup>

### ***Information that must be kept for verification purposes***

51. The Minister recommends that the regulations do not prescribe the information that must be kept for verification purposes. This is because the Act (Section 86D) already specifies that sufficient records must be kept for at least seven years. The regulations will not impose any additional obligations, and hence compliance costs, on firms.

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<sup>19</sup> In April 2010 the Ministry published, *Development of Industrial Allocation Regulations under the New Zealand Emissions Trading Scheme: Summary of Submissions* (the Summary of Submissions). See Section 3: <http://www.mfe.govt.nz/publications/climate/industrial-allocation-submissions-summary/index.html>

<sup>20</sup> See Section 3 of the Summary of Submissions.

<sup>21</sup> This was the key consideration presented in the Consultation Document (page 13).

<sup>22</sup> The Consultation Document proposed that eligible emissions sources excluded upstream natural gas emissions. Stakeholders raised concerns and suggested that it should be included. The Ministry has considered their arguments; this consideration is set out in the Summary of Submissions. See Section 5.2: <http://www.mfe.govt.nz/publications/climate/industrial-allocation-submissions-summary/index.html>

### ***Adjusting allocative baselines to reflect electricity contracts***

52. Under the Act (Section 161C(4)), the Minister has discretion to adjust allocative baselines to reflect the impact of electricity related contracts. In addition, the Minister has the power (under Section 161D(e)(i)(C)(ii) of the Act) to require persons carrying out industrial activities to provide copies of electricity contracts and related information.
53. The rationale for these powers is to prevent large over-allocations where electricity related contracts prevent a full pass-through of electricity costs. The Minister is only pursuing the exercise of his powers under the Act for very large consumers of electricity (i.e. those who consume more than 2000 GWh of electricity at a single site per annum) because of the complexity of investigating contractual arrangements and the need to focus on areas where there is the possibility of material over-allocations.
54. During the consultation one electricity consumer was identified who passed the 2000 GWh threshold. This entity is New Zealand Aluminium Smelters Limited (NZAS) who carry out the activity of aluminium smelting. [Deleted – commercially sensitive], meaning that fixing an allocative baseline would potentially result in significant over or under allocation.
55. In particular analysis of the relevant electricity contracts and related information suggests:
  - An average pass-through of electricity costs to NZAS during the transition phase (until 2013) of [Deleted – commercially sensitive] tonnes of CO<sub>2</sub> equivalent emissions per megawatt hour compared with the pass through of 0.52 tonnes of CO<sub>2</sub> equivalent emissions per megawatt hour that would otherwise be assumed.
  - Using the default pass-through of 0.52 tonnes of CO<sub>2</sub> equivalent emissions per megawatt hour would result in an average over-allocation to NZAS of \$[Deleted – commercially sensitive] during the transition phase.
  - The actual pass-through to NZAS during the 2010 to 2012 period is likely to be significantly higher or lower than the average value above.
56. Therefore the preferred approach to establishing regulations for NZAS for the activity of aluminium smelting is to update allocative baselines every year to reflect operation of electricity contracts and the estimated pass through of cost as this changes from year to year.
57. Officials are developing an algorithm, in consultation with NZAS, to calculate revised baselines annually. It is intended that Cabinet policy agreement will be sought that amendments to the industrial allocation regulations be proposed every year via a paper to Cabinet Legislation Committee that contains updated allocative baselines calculated using an algorithm derived from the analysis of NZAS' electricity contracts.
58. In the meantime, initial regulations can be made with allocative baselines covering NZAS' provisional and final allocations for 2010. This can be achieved because the structure of the relevant electricity contracts allows electricity price pass through for 2010 to be determined with certainty at this point. A "placeholder" baseline of the same value is proposed for NZAS' 2011 provisional allocation to ensure that all required transactions can be completed at the start of 2011 in the event that updating regulations are delayed.

## Consultation

59. In December 2009, the Ministry published the Consultation Document.<sup>23</sup> This consulted on the proposed approach to industrial allocation, including:
- Potentially eligible activities;
  - An electricity allocation factor;
  - Requirements for data collection needed to determine emissions intensity; and
  - Record keeping.
60. The Government received 57 submissions in response to the Consultation Document. Where responses raised issues that were relevant to the options and impacts considered in this Regulatory Impact Statement then these have been identified and discussed in the relevant sections above.
61. In April 2010 the Ministry published the Summary of Submissions, which summarises the key issues raised, the Ministry's assessment of these proposals and the Government's conclusions.<sup>24</sup>
62. In addition, the Ministry has consulted directly with the stakeholders most likely to be substantially affected by the proposed activity descriptions in the process of issuing notices calling for information on activities that were proposed to be prescribed as eligible industrial activities. This is a requirement under the Act (Section 161F). The Ministry has published Activity Analyses setting out its assessment and its recommendations.<sup>25</sup>

## Implementation

63. The proposal will be given effect through regulations prescribing activities as eligible industrial activities under the Act. The Ministry will administer the regulations and the Act provides for allocation decisions to be made by the Chief Executive.
64. The operational requirements on firms are minimal for this proposal. Care has been taken to make sure requirements of firms are clearly articulated to them, require firms to provide only what is necessary, keep administrative processes to a minimum and ensure the Ministry is set-up to provide help on demand.
65. The non-enforcement related implementation risks for this proposal are:
- Firms are not able to provide the correct information to make a valid application;
  - Firms do not make applications by the required dates; and
  - The Ministry does not have the capability to handle applications.
66. Firms are required to provide to the Ministry (annually) details of their total production for the activity and an assessment of what their allocation should be (as required by the

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<sup>23</sup> See: <http://www.mfe.govt.nz/publications/climate/development-industrial-allocation-regulation-ets/index.html>

<sup>24</sup> See: <http://www.mfe.govt.nz/publications/climate/industrial-allocation-submissions-summary/index.html>

<sup>25</sup> See: <http://www.climatechange.govt.nz/consultation/submissions-industrial-allocation/summary-activity-analyses/index.html>

Act). There will be guidance available to assist firms with this requirement, including how to assess their allocation.

67. This information should be authorised by the appropriate person within the firm, so the requirements on the firm are somewhat dependent of their own governance arrangements. As there is a potential risk arising out of the complexity of the allocation assessment to be provided under the Act, the Ministry intends to assist with their application and calculation prior to the firm's authorisation step.
68. The Act sets out specific dates for which applications must be made by. We are ensuring suitable communications are made to emphasise the importance of these dates.
69. The Ministry has been working to map out the requirements and processes to operate these regulations. This work has included estimating expected demand and providing procedures to ensure we have knowledgeable staff in place when needed.
70. The enforcement implementation risks for this proposal are:
  - Firms fraudulently claiming to be eligible firms;
  - Firms claiming higher production than actual;
  - Internal fraud; and
  - Firms refusing to provide information required under Sections 86D or 86E of the Act.
71. The Act supports a self assessment model for applicants to minimise compliance costs. However, to ensure that the objectives of these regulations are met, an enforcement strategy will be put in place to give confidence that allocations are correct. The enforcement strategy centres on a combination of both random and risk-based investigation. Desk-based assessment of applications will be supported by targeted investigation if concerns arise. The Act allows the Chief Executive to request specific records from the applicant to support their application on a case-by-case basis,
72. Random audits will also be carried out. The regulations require firms to keep records necessary to calculate their production for up to 7 years and these would be the focus of audits. The compliance cost to firms of keeping this information is minimal as acceptable records for the purposes of this regulation would be records that firms would be expected to have already for business management and tax purposes (eg records of production, inventory and sales).
73. To ensure internal security, verification and reconciliation processes will be implemented to support the allocation decision-making process.

## **Monitoring, evaluation and review**

74. The Act requires the Minister to conduct regular reviews of the operation and effectiveness of the NZ ETS (Section 160). The first review will occur in 2011 and will occur every five years thereafter. The Act (Section 160(5)) also specifies what the review must cover, although the review is not limited to these matters.
75. In any case, the Minister has to initiate an 'allocation review' at least once in the 5-year period commencing 1 January 2011 and each subsequent 5-year period. The allocation review must consider whether changes to any allocation provided to industry are necessary or desirable. The Act sets out what that the allocation review has to have regard to, such as:

- The relative climate change obligations and emissions policies of New Zealand's trade competitors and trading partners;
- The cost to the taxpayer and the economy of providing free allocation; and
- Changes in emissions mitigation technologies.

76. Under the Act, the Minister sets the terms of reference and appoints a panel to conduct any review (Section 160(6)). The Minister is required to publish the panel's report on the review. If the panel recommend any changes in relation to allocation to industry that require legislative change then the Minister must produce a report containing a response to the panel's recommendations.

## **ANNEX A**

The matters the Minister must have regards to under Section 161E(1) of the Act are:

- Activities should be defined by reference to a physical, chemical or biological transformation of inputs into outputs;
- Activities should not be defined by reference to the technology or fuel used, the age of the plant or the quality of the types of feedstock used;
- Activity definitions should be consistent and equitable across industries;
- The impacts on business investment, geographic location and the structure of the activities;
- Take into account the potential for intermediate products produced when the activity is carried out to be substituted for bought-in inputs;
- The activity definitions used in Australia; and
- Any other matters considered relevant.