

# Regulatory Impact Statement

## Industrial Allocation under the New Zealand Emissions Trading Scheme: Group Six Activities – Production of Whey Powder and Production of Lactose.

### Agency Disclosure Statement

This Regulatory Impact Statement (RIS) 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 Units (NZUs) under Section 161A of the Climate Change Response Act 2002 (the Act).

The production of whey powder and the production of lactose have been identified as the proposed Group Six eligible industrial activities under the Act. Both activities have been identified as trade-exposed and emissions-intensive. The proposed regulations will allow firms who carry out this activity to apply for an allocation of NZUs. 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.

As is the case with all proposed new eligible industrial activities, there are inherent data risks surrounding the calculation of NZUs that firms engaging in these activities will be allocated. The Ministry evaluated these risks as part of the analysis that resulted in its recommendation to make the proposed regulations for the Group Six activities.

Kevin Currie, Director Environmental Protection

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). Under the NZ ETS, some firms 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 need to acquire emissions units and this effectively puts a price on greenhouse gas emissions. From 1 July 2010, the stationary energy, industrial process (SEIP) and liquid fossil fuels (LFF) sectors were obliged to surrender emissions units.
2. Some firms may face a large increase in their fuel and energy costs if their activities are emissions-intensive. 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 overseas firms that do not face a comparable cost on emissions in their home countries.
3. Cabinet has previously decided that assistance<sup>1</sup> in the form of an allocation of emission units would be targeted at those firms most affected by the introduction of a price on emissions, that is emissions intensive and trade exposed (EITE) firms. The Act sets out an intensity-based approach to allocation. Further details of this approach were provided in a previous RIS (for Group One activities).<sup>2</sup> This framework was incorporated into the Act in December 2009. The proposed regulations implement this framework.
4. 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.
5. 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 (NZUs), 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.<sup>3</sup>

---

<sup>1</sup> The level of assistance will be reduced each year by 1.3% beginning in 2013.

<sup>2</sup> See: <http://www.climatechange.govt.nz/publications/ris/ets-industrial-allocation.html>

<sup>3</sup> An Australian eligible activity is defined in section 4 of the Act as “an activity that is, or is likely to be, specified as an emissions-intensive trade-exposed activity in respect of which a person may be allocated emissions units under Australian law”.

6. The Minister has used his power under the Act (Section 161D) to issue notices in the *New Zealand Gazette* requesting information necessary to determine whether to prescribe an activity as an eligible industrial activity and, if so, the allocative baseline for each product of that activity.
7. Regulations allowing allocation of NZUs to EITE firms on an intensity basis have already been agreed to for 24 activities. On 28 June 2010, Cabinet agreed to make regulations prescribing an initial set of 12 activities eligible for allocation of NZUs (the Group One activities) and invited the Minister to present further papers seeking agreement to provide allocation to further activities that meet the eligibility criteria set out in the Act.<sup>4</sup> On 2 August 2010, Cabinet agreed to make regulations prescribing a second set of four activities (the Group Two activities).<sup>5</sup> On 13 September 2010, Cabinet agreed to make regulations prescribing a third set of two activities (the Group Three activities).<sup>6</sup> On 15 November 2010, Cabinet agreed to make regulations prescribing a fourth set of five activities (the Group Four activities).<sup>7</sup> On 28 February 2011, Cabinet agreed to make regulations prescribing one additional activity (the Group Five activity).<sup>8</sup>
8. Following analysis of the information supplied in response to the *New Zealand Gazette* notice, a sixth set containing two additional activities (production of whey powder and the production of lactose) have now been identified as eligible for allocation (the Group Six activities).
9. Further details on the status quo were provided in the previous RIS (for Group One activities).<sup>9</sup>

### ***Problems to be solved***

10. 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 NZUs.
11. The Ministry recommends the making of regulations prescribing the Group Six activities as eligible industrial activities. These activities have been identified as fulfilling the criteria of being both emissions-intensive and trade-exposed, and therefore qualify for eligibility under the Act.
12. Regulations have already been made prescribing the following matters in relation to the eligible industrial activities:
  - 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); and
  - the information that must be kept for verification purposes (Section 161A).

---

<sup>4</sup> See CAB Min (10) 23/6.

<sup>5</sup> See CAB Min (10) 27/7.

<sup>6</sup> See CAB Min (10) 33/8.

<sup>7</sup> See CAB Min (10) 41/5.

<sup>8</sup> See CAB Min (11) 10/1.

<sup>9</sup> See: <http://www.climatechange.govt.nz/publications/ris/ets-industrial-allocation.html>

13. The options available for each of these matters and the Ministry's recommendations were considered in a previous RIS (for Group One activities). It is not proposed to make any amendments to the matters set out above in relation to the Group Six activities. Rather the proposal and this RIS focus on:

- the description of the activities;
- the products to be used as the basis for allocation.

## Objectives

14. 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 come 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

15. How an eligible industrial activity is defined, including the start and end points (i.e. the boundaries of the activity), will determine the emissions that are included and excluded. This will determine whether the activity meets the requirements to be prescribed as an eligible industrial activity and therefore qualify for an allocation as well as 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.

16. Prior to prescribing an activity as eligible, the Minister may issue a notice in the *New Zealand Gazette* requiring information for the purposes of allocation. Section 161E(1) of the Act sets out the matters the Minister must have regard to when defining activities before issuing such a notice. These matters are listed in Annex A.

17. In assessing the information received as a result of the calls for data that were issued, the Ministry has weighted 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 that were proposed for use in Australia's Carbon Pollution Reduction Scheme (CPRS).<sup>10</sup>

### **Activities proposed in the consultation document**

18. In December 2009, the Ministry published *Development of Industrial Allocation Regulations under the New Zealand Emissions Trading Scheme: Consultation Document* (the Consultation Document).<sup>11</sup> The Consultation Document proposed activity descriptions and the products to be used as the basis for allocation.<sup>12</sup> Consistent with Cabinet's initial focus on reducing trans-Tasman competitiveness risks, these were based on activity definitions proposed in Australia for activities that had either been found to be eligible or were under consideration for eligibility.
19. Stakeholders were also invited to nominate additional activities that they considered were potentially eligible.

### **New activities identified during the consultation process**

20. Following release of the December 2009 consultation document, 27 further proposed activities were identified by submitters, as potentially eligible for allocation, two of which were the production of whey powder and the production of lactose.
21. For those activities that were likely to meet, or were very close, to the threshold for eligibility, the Ministry (in consultation with the industry) developed activity and products descriptions. In developing these new activity descriptions, the Ministry assessed them against the matters the Minister must have regard to under the Act and considered potential impacts.
22. Following consultation with the industry, the Ministry published activity analyses (the Activity Analyses) for each activity. The Activity Analyses sets out its assessment against each of the matters the Minister must have regard to and its recommendation to the Minister.<sup>13</sup>
23. For some of the other 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 also the case for the Group Six activities.
24. The Ministry assessed these alternative proposals against the matters the Minister must have regard to under the Act. The Activity Analyses sets out the Ministry's assessment and conclusions.<sup>14</sup> This is considered in more detail below.

---

<sup>10</sup> It is currently unclear as to whether or when this scheme will be introduced in Australia.

<sup>11</sup> See: <http://www.mfe.govt.nz/publications/climate/development-industrial-allocation-regulation-ets/index.html>

<sup>12</sup> See Annex 1: <http://www.mfe.govt.nz/publications/climate/development-industrial-allocation-regulation-ets/index.html>

<sup>13</sup> See: <http://www.climatechange.govt.nz/consultation/industrial-allocation/summary-activity-analyses/index.html>

<sup>14</sup> See Section 2.3: <http://www.mfe.govt.nz/publications/climate/industrial-allocation-submissions-summary/index.html>

## The Group Six activities:

25. It is forecasted that the producers of whey powder will be eligible to receive **[withheld]**, resulting in a cost of **[withheld]** for the year 2011/12. However, in this year they will also receive an allocation for 18 months from 1 July 2010 to 31 December 2011 resulting in a cost of **[withheld]**. The total cost in the 2011/12 financial year is **[withheld]**.
26. It is estimated that the producers of lactose will be eligible to receive **[withheld]**, resulting in a cost of **[withheld]** for the year 2011/12. In this year they will also receive an allocation for 18 months from 1 July 2010 to 31 December 2011 resulting in a cost of **[withheld]**. The total cost in 2011/12 is therefore **[withheld]**. Both these estimates are based on the two for one obligation and \$25 carbon price during the transition phase of the NZ ETS.
27. Fonterra is New Zealand's sole producer of lactose and whey powder and has provided data for both activities that indicates its eligibility for industrial allocation.
28. There were a further three dairy product activities that were considered potentially eligible for allocation. These included the production of lactalbumin powder, the production of whey cheese product and the production of whey protein concentrate (high protein). Notices calling for data for these activities, along with the production of whey powder and the production of lactose, were issued in the *New Zealand Gazette* on 18 May 2010. Following the submission of this data, the Ministry engaged an expert consultant to undertake an audit of the lactose and lactalbumin powder data submissions.
29. The consultant considered the submitters interpretation of the data rules set out in the Act as incorrect. The consultants were of the view that the "plant gate" price had been calculated differently to the manner which was intended by the Ministry. As a result, the revenue was recalculated in the manner the consultant recommended, including for the three data submissions that were not subject to audit but used the same methodology. Following this, the data submissions for lactalbumin powder, the production of whey cheese product and the production of whey protein concentrate (high protein) were withdrawn, as these activities no longer met the thresholds for industrial allocation.
30. Feedback from Fonterra during consultation on the activity definitions of the production of lactose and the production of whey powder was that emissions associated with packing should be included. Fonterra argued that for most perishable food products the act of putting the product in packaging was an integral part of the process and essential for making the saleable product. Officials considered that emissions associated with packaging should be excluded because packaging was a complementary process to the activity. Furthermore, the exclusion of packaging was consistent with other activity definitions.
31. Fonterra requested amendments to the draft activity definitions for both Group Six activities. Fonterra proposed that both definitions specify that the output must meet the compositional parameters of the Codex international food standard but not other parameters contained in that standard. It is possible that some whey powder production would not meet non-compositional parameters, but would have comparable emissions intensity. Officials agreed.
32. Fonterra requested further amendments to the draft activity definition for the production of whey powder. These amendments were in regard to the definition of the input (whey). Fonterra proposed two amendments:
  - An amendment to cover whey powder production from a dilute whey source.
  - An amendment to cater for variation in water content and lactose content.

33. Officials resolved these issues, in consultation with an independent technical expert, by defining whey to consist of residual water and milk solids following the separations of curd from a milk-based coagulation process. This approach avoided issues associated with varying compositional properties for whey, while providing for the production of whey powder from dilute whey sources.
34. As already noted, there is only one producer of lactose and whey powder in New Zealand. Consequently there were no major difficulties in developing the proposed activity descriptions and products, with respect to the matters which the Minister must have regard under the Act including impacts on business investment. Stakeholders did not suggest any substantive changes to the proposals during the consultation (the issues noted above are considered minor). Therefore it was not necessary for the Ministry to consider alternative hypothetical options and their potential impacts. The draft activity definitions were independently assessed by technical experts to ensure they were technology and process neutral and therefore avoided providing advantage to one production process.
35. It is noted that some dairy products, such as lactose, can be manufactured using alternative processes. The activity description is based on the current producer's process (permeate processed to yield lactose) but new entrants could manufacture lactose directly from whey. If this occurs, there may be a need to consult on a separate activity description for the manufacture of lactose from whey. Disincentives for investment in alternative production processes are reduced in two ways. Firstly, section 161(2) of the Act allowing for persons to receive units retrospectively following the coming into force of regulations for eligible industrial activities. Secondly, while each industrial activity is unique and necessarily requires thorough analysis, surety on eligibility for industrial allocation should be gained within 12 months of application.

### The Data Risks

36. In assessing the eligibility of these activities for allocation, detailed checks have been conducted to assess the completeness and reasonableness of the data submitted and the associated risks, consistent with the approach taken for the previous groups of activities.<sup>15</sup> The data risks are set out below.
37. The risk for the revenue data for both activities is considered low.
- Although, the production data is not able to be assessed due to the lack of publicly available data, the assumption that Fonterra is the only exporter of these products means that the units sold externally appear reasonable.
  - The derived market gate price is considered reasonable.
  - For the production of whey powder, revenue would need to increase by **[withheld]** before the level of eligibility falls below the moderate level.
  - For the production of lactose, revenue data was subject to external assurance, which helped assure MfE it was of low risk.
38. The risk for the emissions intensity for both activities is considered low.
- Emissions data for both activities were subject to apportionment methodologies. This is because the manufacturing sites produce multiple products and there is an

---

<sup>15</sup> The Ministry for the Environment contracted PricewaterhouseCoopers to check a complete set of data was submitted by each firm and assess the risk of errors or inaccuracies associated with data resulting in incorrect emissions intensity classifications or allocative baselines. In some cases, specific data sets have been audited.

over-reporting risk. If over-reporting occurs, there is a risk of over-allocating emission units. In relation to both activities this risk was considered low.

- However it is important to note that for the production of lactose, there was a risk that the activity could fall below the moderately emissions intensive eligibility threshold. To counter these risks MfE sought external assurance over this activity's emissions data. This resulted in the risk being considered low.

39. The risk for the emissions data for allocative baseline purposes was considered low for the production of lactose and moderate for the production of whey powder.

- For the production of lactose MfE sought external assurance over the emissions data, therefore it was considered low risk.
- For the production of whey powder, a medium risk of the emissions data associated with the allocative baseline was identified. This risk arises because emissions would need to decrease by only 5% before the allocative baseline would decrease. As this was considered a relatively small percentage, meaning only a small shift was required to decrease the allocative baseline, a medium risk was identified.

## Consultation

40. In December 2009, the Ministry published the Consultation Document.<sup>16</sup> The Government received 57 submissions. Where responses raised issues that are relevant to the options and impacts considered in this RIS then these have been identified and discussed in the relevant sections above.
41. As Fonterra is considered New Zealand's sole producer of lactose and whey powder, only one submission was received on these activities.
42. In April 2010 the Ministry published the Summary of Submissions, which summarises the key issues raised by Fonterra, the Ministry's assessment of these proposals and the Government's conclusions.<sup>17</sup>
43. In addition, the Ministry has consulted directly with Fonterra on activity descriptions before issuing a notice requiring information for the purposes of allocation in the *New Zealand Gazette*. The Ministry has published Activity Analyses setting out its assessment and its recommendations.<sup>18</sup> The consultation requirements in the Act (Section 161F) were met.

## Implementation

44. 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. Further details on implementation were provided in the previous RIS (for Group One activities).

---

<sup>16</sup> See: <http://www.mfe.govt.nz/publications/climate/development-industrial-allocation-regulation-ets/index.html>

<sup>17</sup> See: <http://www.mfe.govt.nz/publications/climate/industrial-allocation-submissions-summary/index.html>

<sup>18</sup> See: <http://www.climatechange.govt.nz/consultation/submissions-industrial-allocation/summary-activity-analyses/index.html>



## **Monitoring, evaluation and review**

45. The Act requires the Minister to conduct regular reviews of the operation and effectiveness of the NZ ETS (Section 160). The first review is underway and others will occur every five years hereafter. The Act (Section 160(5)) also specifies what the review must cover, although the review is not limited to these matters. Further details on monitoring were provided in the previous RIS (for Group One activities).

## **ANNEX A**

Before issuing a notice calling for information for the purposes of allocation to industry, the matters the Minister must have regard to under Section 161E(1) of the Act are:

- Activities must 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 when the activity is carried out;
- Activities should be defined in a way that -
  - is consistent and equitable across industries;
  - takes into account the impacts on business investment, geographic location and the structure of the activities;
  - takes into account the potential for intermediate products produced when the activity is carried out to be substituted for bought-in inputs;
- There should be no overlaps between activity definitions;
- The activity definitions should reflect those used in Australia; and
- Any other matters the Minister considers relevant.