

Regulatory Impact Statement: Future climate change policy treatment for Refining NZ

Agency Disclosure Statement

This Regulatory Impact Statement has been prepared by Ministry for the Environment.

It is intended to support a Cabinet paper about Refining NZ’s future climate change policy treatment when its Negotiated Greenhouse Agreement with the Crown concludes at the end of the 2022. The paper will respond to Cabinet’s direction to further analyse options to make Refining NZ eligible for free allocation of emission units in the New Zealand Emissions Trading Scheme (NZ ETS).

This RIS assesses the risk of carbon leakage if Refining NZ enters the NZ ETS without receiving free allocation. It is inherently challenging to develop evidence and judge the risk of carbon leakage. However this RIS concludes that there is a significant risk in the case of the refining industry.

The preferred option of a regulatory solution would require the Minister for Climate Change Issues to carry out a process that is defined in sections 161A to 161F of the Climate Change Response Act. This involves consulting with the affected party (Refining NZ) on details, publication of a notice calling for data, and making of regulations to specify the allocation baseline or baselines.

Allocation to Refining NZ would then be managed along with others and would be affected by any changes made to the NZ ETS settings following the conclusions of the current NZ ETS Review or at any time in the future.

Roger Lincoln, Director, Climate Change

[Signature of person]

[Date]

Status quo and problem definition

Introduction to Refining NZ

1. Refining NZ is the country's only refinery, and produces around 70% of the New Zealand's transport fuels with the remaining 30% imported from overseas refineries. It is an important part of the Northland economy and employs 300-500 staff. In the course of its activities the refinery emits 1.1 to 1.3 million tonnes of CO₂-equivalent per year, about 1.5% of New Zealand's total emissions. About half of Refining NZ shares are held by BP, Exxon Mobil and Z Energy, while the remaining shares are held by other shareholders.

Summary of problem

2. Refining NZ has a Negotiated Greenhouse Agreement (NGA), signed in 2003, which provides it with similar benefits to an NZ ETS participant receiving a 90% allocation for undertaking a highly emissions-intensive trade-exposed activity.
3. Under current policy settings Refining NZ will not be eligible to receive an industrial allocation once the term of its NGA ends on 31 December 2022 and it becomes a mandatory participant in the NZ ETS.
4. When the NGA ends, Refining NZ will become a mandatory participant under the Climate Change Response Act (CCRA) in respect of the activity of refining petroleum (where refining involves the use of intermediate crude oil products for energy or feedstock purposes) listed in [Part 3](#) of Schedule 3 of the CCRA.
5. Refining NZ will not be eligible to receive an allocation under current policy settings because it does not meet the existing criteria set out in section 161A of the Act, as these have been applied up to now. Without an allocation Refining NZ will need to meet the full cost of buying NZUs for its emissions, plus indirect NZ ETS costs for its purchased gas and electricity.
6. Making Refining NZ bear the full cost of its emissions would not align with the intent of industrial allocation policy in the NZ ETS, which is to prevent carbon leakage. It could raise more general concerns that the NZ ETS is not fit for purpose if it cannot accommodate a significant industry.

Purpose of industrial allocation

7. There is no one legislated purpose for industrial free allocation in the CCRA. Industrial free allocation has been referred to in past policy papers as aiming to achieve the following objectives:
 - Limit costs for NZ ETS participants that are emission-intensive and trade-exposed and minimise the risk of carbon leakage
 - Assist participants in making the adjustment to an NZ ETS¹

¹ 2007 ETS Framework document

- Harmonise with countries that New Zealand trades with (assistance levels were aligned to Australia’s Carbon Pollution Reduction Scheme to avoid trans-Tasman competitiveness concerns)
 - Ensure a smooth transition to a low-carbon economy by reducing economic disruption²
8. Based on these objectives and on the eligibility criteria that target EITE sectors, the currently relevant purpose of free allocation is to minimise the risk of carbon leakage. There were additional drivers when the NZ ETS was first introduced, as free allocation assisted participants in making the initial adjustment to an NZ ETS, but these are less relevant now.

The emissions intensity test

9. It is very difficult to assess the actual risk of carbon leakage for particular activities. The NZ ETS uses simple tests as a proxy to identify activities that may be at risk: an activity is eligible for an allocation if it is emissions-intensive and trade-exposed (EITE).
10. To be eligible for allocation, an industrial activity must be emissions-intensive. The current test for emissions intensity is revenue-based. Emissions intensity thresholds are specified in the CCRA in terms of the emissions from the activity, per million dollars of revenue. Rules for calculating revenue have been set by the Minister. These rules require firms to calculate their revenue as:

$$[\text{Revenue}] = [\text{quantity of output}] \times [\text{market price per unit of output}]$$

11. Under current policy settings, Refining NZ would not meet the criteria to receive an allocation because the activity of refining petroleum is not emissions-intensive as defined by this test.

12. Section 161A(3) of the CCRA states:

The Minister may recommend that regulations be made under subsection (1)(a) that prescribe an activity as an eligible industrial activity if the Minister is satisfied that the activity—

(a) is—

- *(i) moderately emissions-intensive or highly emissions-intensive; and*
- *(ii) trade-exposed*

13. Refining NZ meets the criteria for (a)(ii) (being trade exposed) as it is in competition with refineries overseas that refine oil products that are then imported into New Zealand.

14. However, Refining NZ does not meet the criteria for being either moderately or highly emissions-intensive (a)(i). This is because the thresholds for emissions intensity are calculated by dividing an activity’s emissions produced by its revenue. Refining NZ’s emissions intensity is low because its total revenue includes both the value of the petroleum in its original unrefined state (which is already very high) and the value added

² See RIS on NZ ETS for industrial allocation for group 2 activities (2010) [here](#)

by the refining process (which is low relative to the value of the petroleum in its original state).

15. The existing emissions intensity test has worked well for other trade exposed activities in New Zealand because generally the majority of their revenue is derived from the activity that produces their finished products – and that activity is also responsible for the emissions. This is not true for Refining NZ because the majority of the revenue from the products it makes is not associated with the emissions generated from the refinery. Instead most of the revenue comes from the value of the raw products before they are refined.
16. Refining is unusual among large high-emission industrial activities because the input that refineries process (crude oil) is such a high-value material. Refining typically adds in the order of 10-15% to the value of the raw input. In comparison eligible industries like metal smelting typically double or more the value of their raw inputs.

Risk of carbon leakage for refining with no allocation

17. Crude oil refineries compete in a global market, with both crude oil and refined products easily transported and traded internationally. Currently, there is substantial overcapacity in the world refining industry, and refiners in many countries are in a position to actively market their products for export.
18. Refining is also a very emissions-intensive activity, in the basic sense that full exposure to emissions pricing implies a cost that would substantially reduce its margins and its profitability – in any part of the world – given recent and current world prices for crude oil and refined products. For these reasons, in all jurisdictions where refining emissions are currently priced through an ETS, refiners receive free allocation at the highest available rate.
19. Refining NZ has provided detailed information on its emissions under the existing NGA, and has shared some financial data with officials. In addition, in 2014 Refining NZ commissioned the energy consultancy Hale & Twomey to produce a report [*Independent Review of the Refining NZ Processing Agreement*](#) which assessed the competitiveness of the refinery and its returns to its shareholders.
20. Refining NZ's competitiveness varies from year to year and Hale & Twomey concluded that on average it provides a competitive supply of product. However in the ten year period it studied, there were three years in which Refining NZ was not competitive – i.e. it would have been cheaper for its customers to have purchased the products from overseas refineries had they not had contracts with Refining NZ and the necessary infrastructure existed in New Zealand to facilitate large scale imports of such products.
21. Hale & Twomey noted that on average over the period assessed, the refinery needed to be able to invest \$27 million per year to stay in business:

While the capital investment is shown as split between stay in business and expansion spend, it is critical that a refinery continues to invest as the average quality and efficiency of refineries is improving all the time. Without investment a refinery will gradually become uncompetitive against the competition. This trend has been highlighted in refinery closure decisions in Australia. Many of these

refineries were not generating enough income to justify new investment so they gradually fell behind competitor refineries in efficiency. This made it more and more difficult to compete profitably. In Refining NZ's case the processing fee has been providing sufficient income for it to invest both stay in business capital and in expansion and upgrading projects.

22. A 90% allocation in the NZ ETS would be worth approximately \$18 million per year to Refining NZ (similar to what it currently receives under the terms of the NGA which exempts it from the NZ ETS). Refining NZ's profits have varied substantially over the past five years: \$47 million in 2016, \$151 million in 2015, \$10 million in 2014, -\$5 million in 2013 and \$31 million in 2012. While in some years, particularly 2015, allocation would have had little effect on Refining NZ's profitability, in other years allocation would have had significant impact. Overall full exposure to the cost of ETS obligations would nearly halve the current profitability of the refining business, and could significantly reduce its ability to re-invest to remain competitive over time.
23. The level of ETS costs for refining emissions will continue to change over time and will be affected by policy decisions. However the current ETS Review is focused on aligning the NZ ETS with New Zealand's emission budget for 2021–30. There is no prospect that changes to settings of the NZ ETS made for this purpose will materially affect the risk of leakage.

Consequences of the carbon leakage

24. Carbon leakage causes undesirable environmental and economic outcomes, and therefore has important political implications also. While the closure of the refinery would reduce New Zealand's emissions by over 1 million tonnes of CO₂-equivalent per year, increased refining activity would occur offshore. This could increase or marginally reduce global emissions. However, as Refining NZ's energy intensity (reported under the NGA) ranks well below average in the world, and as the increase in activity would occur in countries without the incentive of emissions pricing, there is a greater chance that it would lead to a net increase in global emissions.
25. The closure of Refining NZ, which employs approximately 300 people, would have a significant negative impact on the Northland economy and would leave New Zealand dependent on the supply of refined petroleum products sourced from overseas refineries that may choose to prioritise supply to other nations ahead of New Zealand at times of shortages.
26. If and when there is wide coverage of ETS schemes in competing jurisdictions, the risk of carbon leakage will be reduced. There has been progress internationally with ETS schemes being established in South Korea and China for example. However, much of New Zealand's imported refined fuel comes from refineries in Singapore and Taiwan. These two jurisdictions have no emission prices.

History of allocation eligibility in New Zealand

27. The NZ ETS industrial allocation regime was established in 2009 and is closely based on the then-proposed Australian Carbon Pollution Reduction Scheme (CPRS). The CPRS was intended to have two parallel tests for determining whether an activity was

emissions-intensive. These were a revenue test and a value-added test. The NZ ETS adopted the revenue test but not the value-added test.

28. The intention of the CPRS was for the value-add threshold to be three times greater than the revenue threshold. This threshold level was based on research in to emissions-intensive industries in Australia.
29. The Government decided not to adopt a value-added test for the NZ ETS, in part because there was a safety-valve for relevant activities in the form of an alternative 'Australian Track' allowing eligibility for any activities receiving an allocation in Australia. This decision was made in the context that:
 - For all other activities in New Zealand that were thought likely to be at risk of leakage, there was a close correlation between revenue and added value;
 - Any short to medium term competitiveness issues for Refining NZ were covered by the existing NGA, which then had 13 years to run; and
 - Refining could eventually have become eligible for allocation through the Australian Track. It would clearly pass the value-added test in Australia, and would be automatically eligible in New Zealand as well.
30. Since that time Australia has not implemented the CPRS or any comparable emission pricing scheme. For this reason the Australian Track is not currently available, although it remains in the CCRA.

Why do something now when the NGA will not conclude until the end of 2022?

31. Investments are being considered now which have a life well past 2022. Refining NZ argues that its ability to make investment decisions is hindered while this issue remains unresolved. Refining NZ has a history of significant investments in capital projects that have required the approval of its Board more than five years before completion. These projects generally improve the efficiency of the refinery and can have good environmental outcomes. Refining NZ argues it would be much more difficult to gain approval for further capital investments.
32. Over time the resulting under-investment could result in closure. Such investments can be driven by compliance issues, such as past reductions for sulphur in diesel and benzene in petrol. Currently, Refining NZ needs to respond to more stringent international regulation of sulphur in marine fuel.

Objectives

33. This project has one objective, which is to resolve Refining NZ's future carbon leakage risk in a way that is not inconsistent with broader NZ ETS design policy intent.
34. Three criteria are used to assess the options against this objective:

Criterion 1: Alignment with the purpose of industrial allocation to minimise carbon leakage. The risk of carbon leakage in the short to medium term has two elements: first the level of confidence for Refining NZ to continue investing in the short term (up to 2022;

and second (more significantly) the ongoing risk of leakage once the option is in place after 2022.

Criterion 2: Maintaining the market and environmental integrity of the NZ ETS. This includes issues like real and perceived equity in the administration of the ETS, and any impact on achievement of the overall purposes of the ETS.

Criterion 3: Minimising administrative burden and complexity. This includes the cost and time needed for legislation or other processes to implement the option, as well as ongoing compliance and administration costs for Refining NZ and the Crown.

35. The fiscal impacts for the Crown and the net surrender costs for Refining NZ are also considered. However, these are generally the same for all options except the status quo.

Options and impact analysis

36. The options assessed are:

Option 1: do nothing (status quo). The NGA continues until its expiry at the end of 2022. In 2023 Refining New Zealand becomes a mandatory participant in the NZ ETS and receives no allocation.

Option 2: Include a value-add test in the CCRA. The CCRA would be amended to provide a mechanism that differs from the current emission-intensity test and makes Refining NZ eligible for an allocation.

Option 3: Minister publishes a notice in the Gazette changing the methodology for calculating Refining NZ's revenue. The Minister publishes a notice in the Gazette setting a new methodology for calculating how revenue is calculated for the activity of refining petroleum. The revenue test would be adjusted so that it would not exclude petroleum refining which, because of the high pre-activity value of petroleum, and the relatively low value added by the refining process, does not meet the current criteria of being emissions intensive.

Option 4: Renew the NGA. The NGA could either be extended past 2022 through a supplementary agreement signed between the Crown and Refining NZ or a new NGA could be developed. An extension to the existing NGA would set a new target pathway for Refining NZ, while a new NGA could instead use a method that more closely aligns with NZ ETS allocation settings.

Option 5: Amend the CCRA to declare that Refining NZ is eligible for allocation. The CCRA could be amended to declare either that the activity of refining petroleum is eligible for 90% allocation or that it is an emissions intensive and trade exposed activity and is exempt from the emissions intensity test.

Option One: Status Quo

Summary

37. The NGA treats Refining NZ similarly to how it would be treated if it were an NZ ETS participant receiving a 90% allocation for undertaking a highly emission-intensive trade-exposed activity.

38. When the NGA ends on 31 December 2022, Refining NZ will become a mandatory participant under the Act in respect of the activity of refining petroleum (where refining involves the use of intermediate crude oil products for energy or feedstock purposes) listed in [Part 3](#) of Schedule 3 of the Act.
39. Refining NZ will not be eligible to receive an allocation under current policy settings because it does not meet the existing criteria set out in section 161A of the Act. Without an allocation Refining NZ will bear the full cost of its emissions.
40. Refining NZ argues that without an industrial allocation it will not remain competitive with the overseas refineries that it competes with and that it may be forced to close. It also argues that its ability to make significant capital investment decisions is impeded while this issue is unresolved.
41. If Refining NZ was exposed to the full carbon price and, as a consequence, either closed or reduced its output and New Zealand imported more petroleum products from overseas refineries that do not face a carbon price, then not providing an allocation to Refining NZ will have resulted in significant carbon leakage.

Fiscal impacts

42. The fiscal impact of the status quo would be that the Crown would incur no costs when Refining NZ becomes a mandatory participant in the NZ ETS in 2023 as Refining NZ would not be eligible for any NZ ETS allocation.
43. As Refining NZ would not receive any allocation, the ETS cost for Refining NZ under the status quo option would be approximately \$20 million. This cost represents the refinery's emissions, which are about 1-1.2 million tonnes of CO₂-equivalent per year, multiplied by the NZU price, which is currently about \$18.

Assessment against criteria

Criterion 1: Aligns with the intention of industrial allocation in the NZ ETS to minimise carbon leakage

44. This option does not align with this objective as it could result in significant carbon leakage. Exposure to the full carbon price could result in either the closure of the refinery or a reduction in its output with a greater proportion of New Zealand's petroleum products being imported from overseas refineries that do not face a carbon price.
45. Future changes to NZ ETS policy settings will affect the risk of leakage. The changes that are currently being made from the NZ ETS Review, and further decisions intended for 2018, are intended to align the NZ ETS and its settings to New Zealand's 2021–30 emission budget. They are a clear signal that unit supply will be managed to maintain a substantial price signal through this period, so that there is no realistic prospect that such changes will reduce the effect on Refining NZ's competitiveness.
46. Changes to emission unit prices from time to time may also mean that the risk of leakage changes. However in the case of refining, as for most of the industry sectors affected by allocation policy, long investment horizons mean that the real risk is a long term one, and not fundamentally affected by short term price changes.

47. The approach of using emission intensity for eligibility deliberately takes the current emission price out of consideration. For all allocations in the ETS, eligibility is based on measures that are not affected by price changes from time to time.

Criterion 2: Maintains the market and environmental integrity of the NZ ETS

48. This option does not align with this objective. Not providing an allocation to a firm performing an activity that is trade exposed and highly emissions intensive (in the plain English sense), while continuing to provide allocation to other activities, would raise major concerns about how equitably the NZ ETS treats industrial participants.

Criterion 3: Minimises administrative burden and complexity

49. As this option recommends the status quo, it has no implementation implications other than the drafting of a paper seeking Cabinet agreement that this would be the preferred option.

Option Two: Include a value-add test in the Climate Change Response Act

Summary

50. This option would involve amending the CCRA to include a value-add test alongside the existing revenue-based approach which would remain the default test.

Definition of value-add

51. A value-add test would use a different threshold as described below, in recognition that it is a different economic measure and not equivalent to revenue. Value-add can be defined in various ways. This paper uses the definition that was intended to be applied in the Australian CPRS. Under this definition, value-add would be calculated by:

- a. Calculating revenue for the activity in the same way as for the current revenue test, i.e.
[quantity of output] × [market price per unit of output]
- b. Subtracting all significant non-capital non-labour input costs.

Potential amendment to the CCRA

52. A value-add test could be included in the CCRA by inserting the underlined words (with the numeric thresholds being subject to revision) below into section 161C:

161C Other eligible industrial activities

(1) For the purposes of [section 161A\(3\)\(a\)](#), an activity is—

(a) moderately emissions-intensive if the specified emissions from the activity are equal to or greater than 800 whole tonnes per \$1 million of specified revenue from the activity, but less than 1 600 whole tonnes per \$1 million of specified revenue from the activity, or if the specified emissions from the activity are equal to or greater than 2 400 whole tonnes of value-add from the activity, but less than 4 799 per \$1 million of value-add from the activity:

(b) highly emissions-intensive if the specified emissions from the activity are equal to or greater than 1 600 whole tonnes per \$1 million of specified revenue from the activity or if the specified emissions from the activity are equal to or greater than \$4 800 whole tonnes of value-add from the activity:

(c) trade-exposed unless, in the Minister's opinion,—

(i) there is no international trade of the output of the activity across oceans; or

(ii) it is not economically viable to import or export the output of the activity.

Determining value-add threshold levels

53. In 2009 the Ministry for the Environment contracted the consultancy Covec to prepare a report in 2009 on *Implementing an Intensity-Based Approach to Allocation*. The report examined whether the approach to free allocation of emission units under the NZ ETS should follow the approach used under the Australian carbon pollution reduction scheme CPRS.

54. Covec's report explains the Australian Government's rationale for setting value-add thresholds at three times the revenue thresholds:

In order to find the relevant corresponding value added threshold [the Australian Government] considered the Australian Bureau of Statistics (ABS) National Accounts Input Output Tables to assess the relationship between revenue and value added. It was found that, for the most emissions-intensive industries in the country, revenue is on average three times higher than value added. Therefore the Government decided to set the value-added threshold for emissions intensity at three times the revenue threshold. Where a firm is clearly included on the revenue threshold they would not need to assess their emissions against the value-added threshold. The advantage of the second metric is where a firm might be on the margin of being emissions intensive or on the margin between 60% or 90% assistance. A second threshold option would benefit firms who are on the margin, and have a value added to output ratio higher than 1/3, i.e. they are more valuable to the economy.

55. If this option was selected, a consultant could be contracted to undertake a similar survey to the one described above of New Zealand businesses. Such a survey could conclude that New Zealand should have slightly different thresholds to those intended for the CPRS.

Scope of this option

56. Unlike the other options proposed in this paper, this option would provide a new eligibility route to any activity that does not meet the existing revenue thresholds but would meet a value-add threshold. This option therefore has a potentially wider scope than the other options that would apply specifically to activity of refining petroleum.

57. When a value add test was being considered for the NZ ETS, analysis indicated that the CPRS thresholds would not assist activities in dairy and meat processing, which are not emissions intensive under a revenue or a value add test. A calculation based on preliminary data supplied by Cavalier Woolscourers also indicated that woolscouring was

unlikely to meet the threshold. However, it is not possible to be certain that refining is the only activity in New Zealand that would meet this test in the future.

Fiscal impacts and risks

58. The expected fiscal impact on the Crown accounts of providing a 90% allocation to Refining NZ would be approximately \$18 million. The units the Crown would provide to Refining NZ would be additional to units already provided as free allocation to EITE activities, therefore other free allocation recipients would not be impacted.
59. It is possible that other activities might be put forward that would meet a value add test, and would then have to be considered for an allocation. There is a risk that this would ultimately result in additional fiscal costs. Also, any test is only a proxy, and it would not be possible to assess the actual risk for individual applicants. Consequently this also opens up some risk of allocations being given to activities that are not really at risk of leakage.

Cost to Refining NZ

60. The net ETS cost to Refining NZ would be approximately \$2 million, which is the cost of the units it would have to purchase (the 10%). This is a benefit of approximately \$18 million against Option 1 (the status quo).

Assessment against criteria

Criterion 1: Aligns with the intention of industrial allocation in the NZ ETS to minimise carbon leakage

61. Amending the CCRA to include a value-add test with appropriate thresholds would align with the intention of industrial allocation in the NZ ETS. The analysis from the time of the development of the NZ ETS concluded that a value-add test was not included in the original test because administering it would be complex and affected firms would be able to access allocation through the Australian track.
62. A Cabinet in-principle policy decision would go some way towards providing Refining NZ with a greater certainty about its climate change policy treatment following the conclusion of the NGA. However, as implementing this option will require an amendment to the CCRA, which is unlikely to be possible until 2018 at the earliest, Refining NZ may consider that this option provides it with insufficient certainty in the short to medium-term.
63. The legislative process to include a value-add test in the CCRA would take at least 12-18 months to complete if the Bill had a high priority. If it is not a Government priority, it could take significantly longer. The Bill would be subject to revisions made following Select Committee consideration, which could significantly change the value-add test in its final form. For example, the thresholds could be altered. The passing of the Bill would also be contingent on the Government getting enough support for it.
64. Refining NZ argue that this lack of certainty during this lengthy implementation process could prevent them from getting board approval for large-scale capital investments, which if they do not get may result in carbon leakage (through either the refinery closing or down-scaling).

Criterion 2: Maintains the market and environmental integrity of the NZ ETS

65. The inclusion of a value-add test in the NZ ETS would align with the intent of industrial allocation policy at the time the CCRA was drafted, specifically that some activities would be eligible via the Australian track due to the inclusion of a value-add test in the CPRS.
66. There is a risk that the amendment will be perceived as providing special treatment to Refining NZ – although this would be incorrect if the value-add test was available to any activity.
67. Setting the thresholds would require managing the original concern around adverse selection by firms. If thresholds were set too low, those firms carrying out activities currently eligible under the 60% revenue-based threshold could potentially increase their allocation by ‘threshold-jumping’ to a 90% value-added threshold. This would increase the generosity of allocation beyond the policy’s intent. We consider that the risk of such activity occurring using the thresholds intended to be used in the CPRS is low.

Criterion 3: Minimises administrative burden and complexity

68. This option requires an amendment to the CCRA. Once the legislation was in place, the Minister would need to call for data from Refining NZ which would inform the calculation of the value that the refining process adds and, in turn, the calculation of the value-add test that should be applied to Refining NZ. The value-add test would then be implemented using a Gazette notice issued under section 161D.
69. The Ministry would carry out the test to determine that refining is an eligible industrial activity. Regulations would then be made, provided that the test is met. The Regulations would use the data collected from Refining NZ to determine the baseline. Once the Regulations have been notified in the Gazette, and the 28 day rule observed, the activity of refining petroleum would be eligible for allocation in the NZ ETS.
70. The Environmental Protection Authority would then need to update the New Zealand Emissions Trading Register. This would be a straightforward process of updating the list of currently eligible activities in the New Zealand Emission Trading Register. The cost of this would be minimal.
71. Once implemented, the allocation of units to Refining NZ would be part of the existing process that allocates units to allocation recipients.
72. As noted earlier in the paper, previous analysis undertaken in 2009 raised concerns about the amount of evidence it would require to calculate value-added. Officials also noted that divergent stakeholder views and the technical nature of calculation methodologies gave rise to litigation risks. However, officials in Australia did consider a value-add test to be feasible and the emissions trading scheme in California uses value-add thresholds for its allocation eligibility tests.

Option Three: Minister publishes a notice in the Gazette changing the methodology for calculating Refining NZ's revenue

Summary

73. This option would make use of an existing provision in the CCRA, section 161D(1)(g)(i), which provides the Minister with the power to specify a methodology for calculating an activity's revenue through a notice in the Gazette. Using this section, the Minister could specify a new methodology for calculating revenue that applies only to the activity of refining petroleum. Such a new methodology would need to define revenue in a way that substantially reduces the dollar value associated with the activity of refining petroleum. This would be a new use of this power, which has previously only been used to implement a consistent rule for all sectors.
74. Currently, a single consistent revenue rule is applied to all activities as described above, calculating total revenue from activity outputs and their market price.
75. A new rule for refining petroleum might, for example, define revenue to be only the fees paid to Refining NZ for its processing. This would allow an assessment for refining. Use of this specific rule could limit any precedent effect, because it would only be directly applicable to other activities if they use a similar business model to Refining NZ – however it is also possible that other industries might restructure themselves and change their business model.
76. To implement this option, the Minister would call for data from Refining NZ which would inform the calculation of revenue from the activity of refining and, in turn, the calculation of the revenue test that should apply to Refining NZ. The revenue test would then be Gazetted under section 161D.
77. The Ministry would then do the 161C test to determine that refining is an eligible industrial activity. Regulations would then be made under section 161A, provided that the section 161C test is met. The Regulations would use the data collected from Refining NZ to determine the baseline. Once the Regulations have been notified in the Gazette, and the 28 day rule observed, the activity of refining petroleum would be eligible for allocation in the NZ ETS.

Fiscal impacts

78. The fiscal impact on the Crown accounts of providing a 90% allocation to Refining NZ would be about would be approximately \$18 million. The units the Crown would provide to Refining NZ would be additional to units already provided as free allocation to EITE activities, therefore other free allocation recipients would not be impacted.

Cost to Refining NZ

79. The net ETS cost to Refining NZ would be approximately \$2 million, which is the cost of the units it would have to purchase (the 10%). This is a benefit of approximately \$18 million against Option 1 (the status quo).

Assessment against criteria

Criterion 1: Aligns with the intention of industrial allocation in the NZ ETS to minimise carbon leakage

80. This option would make Refining NZ eligible for allocation, reducing the risk of carbon leakage. It therefore aligns with the intention of allocation policy. This option could be implemented sooner than the options that require legislative change. It would therefore be possible to provide greater certainty to Refining NZ by determining eligibility and publishing an allocation baseline, sooner than for other options. This would provide certainty for investment up front and so mitigate the risk of carbon leakage more effectively than the legislative options.

Criterion 2: Maintains the market and environmental integrity of the NZ ETS

81. Implementing this option means creating a different rule for one activity. Other NZ ETS participants and some members of the public would likely perceive this as Refining NZ receiving special treatment which makes the NZ ETS less fair and more open to corporate lobbying. This has the potential to undermine stakeholder acceptance of the eligibility decisions that have been made in the past, and to be seen by other industries as a precedent.

82. This option may well lead to other participants lobbying the Minister to declare their activities eligible for allocation. The risks of negative perception and lobbying can be mitigated to some extent by choosing a test that appears consistent with the treatment of other activities and is not too easily seen as a broad precedent.

83. Also, it would be critical to explain the rationale for implementing this option clearly to the public with as much transparency as possible. While some would perceive this option to be undermining the integrity of the NZ ETS, it can be argued that implementing this option would demonstrate the ability of the government to adjust NZ ETS settings where appropriate to ensure that the risk of carbon leakage is minimised.

Criterion 3: Minimises administrative burden and complexity

84. This option would avoid a lengthy legislative process and would need only approval from Cabinet followed by publication of the Gazette notice and a regulation process.

85. The Environmental Protection Authority would need to update the New Zealand Emissions Trading Register. This should be a straightforward process of updating the list of currently eligible activities in the New Zealand Emission Trading Register. The cost of this would be minimal.

86. Once implemented, the allocation of units to Refining NZ would be part of the existing process that allocates units to allocation recipients.

Option Four: Renew or extend the Negotiated Greenhouse Agreement

Summary

87. The existing NGA could either be extended or replaced. Renewing the NGA could be done either with a view to preserving its operation over the long-term, or until amendments are made to the CCRA, at which time Refining NZ could be made eligible for allocation in the NZ ETS. In either case Refining NZ's need for greater policy certainty would be satisfied.
88. Extending the existing NGA would require the development of a new target pathway, which could require the assistance of a consultant that specialises in benchmarking. The pathway would then need to be agreed between the Minister and Refining NZ.
89. Alternatively, the current NGA could be replaced with an entirely new agreement. This new agreement would not necessarily need to include a target pathway like the existing NGA. Instead, it could include terms that would mirror, as much as possible, treatment as a highly emissions-intensive trade-exposed activity in the NZ ETS. For example, it could require Refining NZ to surrender emission units to the Crown annually equal to 10% of its total emissions.
90. The existing NGA was developed over a decade ago, prior to the development of the NZ ETS. It reflects New Zealand's climate change policy of the time. Replacing the existing NGA with an entirely new agreement would provide an opportunity to redesign it so that it aligns better with current policy.
91. For either extending or replacing the NGA, the process would include agreeing the terms between the Minister and Refining NZ, Cabinet approval of the terms, negotiation of a pathway and any other details, and getting Cabinet approval for a new NGA.

Fiscal impacts

92. The fiscal impact on the Crown accounts of replacing the NGA would be dependent on the terms of the agreement. If the NGA provided similar treatment to 90% allocation in the NZ ETS, then the fiscal impact would be similar also.

Assessment against criteria

Criterion 1: Aligns with the intention of industrial allocation in the NZ ETS to minimise carbon leakage

93. Extending or replacing the NGA would minimise potential carbon leakage if the terms of the future NGA were such that Refining NZ was not made trade exposed. This option aligns with this objective to the extent that it minimises carbon leakage.
94. In addition, legislative amendment may be required to provide legal certainty about a renewed or new NGA.

Criterion 2: Maintains the market and environmental integrity of the NZ ETS

95. Continuing the NGA may be perceived as unnecessary now that we have the NZ ETS. It could raise more general concerns that the NZ ETS is not fit for purpose if it cannot accommodate a significant industry.
96. NZ ETS participants and the public could perceive the NGA as Refining NZ receiving special treatment. This risk is amplified as the NGA is the least transparent option. The Minister and the Ministry could be criticised for continuing a policy that is not as transparent as the NZ ETS.
97. This option would also raise the issue of whether and how any future changes to allocation policy might apply to Refining NZ. These would become a matter for individual and possibly difficult negotiation, instead of the normal policy process and consultation.
98. Extending the NGA would raise the profile of NGAs and could lead to other EITE firms investigating and/or lobbying for their own NGAs if they consider it could be more advantageous than participating in the NZ ETS.
99. Refining NZ's preference is to be made eligible for allocation in the NZ ETS rather than for the NGA to be extended. Extending the NGA may be met with opposition from Refining NZ.

Criterion 3: Minimises administrative burden and complexity

100. Negotiation of the current NGA was a resource-intensive process involving lengthy effort by officials, Refining NZ, and contractors as well as very substantial legal costs for both sides. The NGA is a very detailed document and places onerous reporting requirements on Refining NZ. It also creates a need for officials to review technical submissions each year before approving any unit transfers. If Refining NZ was an ETS participant, the reporting and review would be done more efficiently as part of the normal ETS administration carried out by the EPA.
101. A new or extended NGA might be made simpler, subject to Refining NZ's agreement, but it would inevitably involve significant effort and costs for both sides in the negotiation phase, and some duplication of administration and reporting costs after that.
102. Once implemented, Refining NZ and the Ministry would be required to fulfil their reporting and unit transfer obligations under the terms of the NGA. As a result, this option is likely to be the most administratively cumbersome option for both Refining NZ and the Ministry.

Option Five: Amend the CCRA to declare that refining is eligible for allocation

Summary

103. The CCRA could be amended to declare either that the activity of refining petroleum is eligible for 90% allocation or that it is an emissions intensive and trade exposed activity and is exempt from the emissions intensity test.

Fiscal impacts

104. The fiscal impact on the Crown accounts of providing a 90% allocation to Refining NZ would be approximately \$18 million. The units the Crown would provide to Refining NZ would be additional to units already provided as free allocation to EITE activities, therefore other free allocation recipients would not be impacted.

Cost to Refining NZ

105. The net ETS cost to Refining NZ would be approximately \$2 million, which is the cost of the units it would have to purchase (the 10%). This is a benefit of approximately \$18 million against Option 1 (the status quo).

Assessment against criteria

Criterion 1: Aligns with the intention of industrial allocation in the NZ ETS to minimise carbon leakage

106. Amending the CCRA to declare the activity of refining petroleum eligible for free allocation would align with the intention of industrial allocation policy to provide free allocation to firms engaged in activities that are both emissions intensive and trade exposed.

107. A Cabinet in-principle policy decision would go some way towards providing Refining NZ with a greater certainty about its climate change policy treatment following the conclusion of the NGA. However, as implementing this option will require an amendment to the CCRA, which is unlikely to be possible until 2018 at the earliest, Refining NZ may consider that this option provides it with insufficient certainty in the short to medium-term.

108. The legislative process would take at least 12-18 months to complete if the Bill had a high priority. If it is not a Government priority, it could take significantly longer. The Bill would be subject to revisions made following Select Committee consideration, which could change its provisions. The passing of the Bill would also be contingent on the Government getting enough support for it.

109. Refining NZ argue that this lack of certainty during this lengthy implementation process could prevent them from getting board approval for large-scale capital investments, which in turn may result in carbon leakage (through either the refinery closing or down-scaling).

Criterion 2: Maintains the market and environmental integrity of the NZ ETS

110. The clearly defined and narrow scope of this option would avoid the risk of implementing a value add test that unintentionally allowed firms to qualify for allocation that should not. However, it would represent a shift away from one set of rules for all participants and presents a significant system integrity issue. It would inevitably lead to other participants lobbying the Minister to amend the CCRA to make their activities eligible for allocation.

111. This is also a higher risk option from a World Trade Organisation perspective because it involves separate legislated provision for allocation given to one sector. This potentially raises questions of sector-specific subsidies.

Criterion 3: Minimises administrative burden and complexity

112. This option requires an amendment to the CCRA. Once the legislation was in place, the Minister would need to call for data from Refining NZ to inform the calculation of a baseline. Regulations would then be made, to include refining as an eligible activity and to set the baseline. Once the Regulations have been notified in the Gazette, and the 28 day rule observed, the activity of refining petroleum would be eligible for allocation in the NZ ETS.
113. The Environmental Protection Authority would then need to update the New Zealand Emissions Trading Register. This would be a straightforward process of updating the list of currently eligible activities in the New Zealand Emission Trading Register. The cost of this would be minimal.
114. Once implemented, the allocation of units to Refining NZ would be part of the existing process that allocates units to allocation recipients.

Conclusions and recommendations

115. Option one (status quo; no allocation) is not recommended. Full exposure to the carbon price upon entry into the NZ ETS would put Refining NZ's competitiveness at significant risk, could lead to closure or under-investment (eventually also leading to closure). Closure of the refinery would result in negative environmental and economic outcomes.
116. The ministry's preferred option is option three (a Gazette notice). This is the option that meets the objective while avoiding the significant problems of lengthy and uncertain legislative or negotiation processes, and the risk of spill-over to other activities.
117. Option three would require much less time and cost to implement, and could more effectively mitigate any short-term risk of leakage by setting the allocation for refining well ahead of the expiry of the NGA. This option does not automatically open up a route for other activities to become eligible. However, it would be a one-off change to a well-established rule for eligibility, and could be seen as a precedent by others.
118. Option two (a value-add eligibility test) or option three (a Gazette notice) would bring refining into the NZ ETS on an equitable basis. In the long term either option would align with the intention of industrial allocation policy to prevent carbon leakage. Either option would help to maintain the integrity of the ETS by allowing equitable treatment across industrial activities, and would avoid the specific problems associated with the other options.
119. Option two would contribute further to maintaining the integrity of the NZ ETS by setting up a rules-based eligibility test that is not specific to refining. However, in doing so, this option would also open up a fiscal and policy risk of making other activities eligible.
120. Option four (renew the NGA) is not recommended. A new or renegotiated NGA could minimise the risk of carbon leakage, but would leave Refining NZ outside the NZ ETS and any future policy processes. This option would also involve excessive overhead costs for both Refining NZ and the government.

121. Option five (legislation specific to refining) is not recommended. This option would help minimise the risk of carbon leakage. However it would add to the perception of special treatment for one participant, which could be seen as a precedent by other sectors. By legislating for such special treatment, it would raise perceptions that WTO rules may be breached.

122. The Ministry for the Environment has met with Refining NZ several times and discussed the options described in this paper. Refining NZ's preference is option three – that the Minister publishes a notice in the Gazette changing the methodology for calculating Refining NZ's revenue approach.

Implementation plan

123. The process of calling for data, Gazetting a revenue rule, and setting and regulating for a new baseline is set out in the CCRA. This would take several months due to the steps required by legislation and the technical content of the refining activity. The process can be started at any time after a decision is made.

124. It will be important to communicate that there is a clear rationale for the decision to allow refining to receive an allocation, based on assessment of the real risk of carbon leakage in this sector. It will also be important to manage the perception and precedent risks. This will involve careful specification and framing of the Gazetted revenue rule as well as management of communications by the government and by Refining NZ.

125. If this Gazette option (option 3) is selected, the Ministry for the Environment would work with Refining NZ to ensure that these issues can be managed, and to run this process as efficiently as possible. The timing, at some point between now and 2022, would need to be discussed with Refining NZ and agreed by the Minister.

Monitoring, evaluation and review

126. If the value-add test option is implemented, a specific focus of monitoring, evaluation and review would be on assessing the uptake of allocation through the value-add test and whether any other activities are affected. The impacts of the inclusion of a value-add test could also be assessed as a part of future review of the NZ ETS.

127. If any option to make refining an eligible activity is implemented, the existing monitoring and evaluation framework for the NZ ETS will apply to consideration of allocation for the activity of refining petroleum. This will include any consideration of the need for allocation and the amounts provided, for refining as well as for other activities.