

Cover Note Erratum - Climate Change: The Outcome of the First Projects Tender Round [Ref: POL (04) 8/10]

Cover Note

On 8 April 2004, Cabinet Policy Committee considered the paper "Climate Change: The Outcome of the First Projects Tender Round" (Ref: POL (04) 73). This paper and the associated Cabinet decisions (Ref: POL Min (04) 8/10) are included.

Where information from the paper and minute has been withheld under the Official Information Act (1982) it is clearly labelled. That information has been withheld on the following grounds:

Under ss. 9(2)(f)(iv) because "the withholding of the information is necessary to: Maintain the constitutional conventions that for the time being protect: the confidentiality of advice tendered by Ministers of the Crown and officials";

Under ss. 9(2)(i) because "the withholding of the information is necessary to: Enable a Minister of the Crown or any Department or organization holding the information to carry out, without prejudice or disadvantage, commercial activities"; and

Under ss. 9(2)(j) because "the withholding of the information is necessary to: Enable a Minister of the Crown or any Department or organisation holding the information to carry on, without prejudice or disadvantage, negotiations (including commercial and industrial negotiations)".

Erratum

For Cabinet Policy Committee Paper POL (04) 73 [Climate Change: Outcome of the First Projects Tender Round], paragraphs 3, 24 and 49 (2), and in the accompanying Cabinet Policy Committee Minute POL Min (04) 8/10, paragraph 2, it is incorrectly stated that the successful projects potentially contribute an additional 5.3 PJ of renewable electricity generation. This figure includes about 2.4 PJ of fossil fuel generation from a cogeneration plant.

IN CONFIDENCE

Chair
CABINET POLICY COMMITTEE

CLIMATE CHANGE: OUTCOME OF THE FIRST PROJECTS TENDER ROUND

Executive Summary

1. This paper reports on the outcome of the first Projects to Reduce Emissions (Projects) tender round and considers options to further enhance the value of the Projects Programme.
2. The Projects to Reduce Emissions programme is a key part of the Government's climate change policy package to contribute to achieving New Zealand's Kyoto Protocol emission obligations. The programme aims to do this by providing an incentive for projects that reduce emissions below business-as-usual during the Kyoto Protocol's first Commitment Period ("CP1": 2008 – 2012).
3. In the first tender round held in September to October 2003, tenders were received for 46 different projects. There were 15 successful projects reducing greenhouse gas emissions by nearly four million tonnes CO₂-equivalent during the first Commitment Period. Further an additional 5.3 PJ of renewable electricity generation is expected to be provided by these projects. This is equivalent to about two years of growth in electricity demand.
4. Fourteen of the successful project tenderers have signed project agreements with the Crown. One successful project tenderer has withdrawn, and the New Zealand Climate Change Office is proceeding to offer the emissions units from this project to other tenderers whose projects were eligible but were originally unsuccessful in the tender process.
5. A decision on the provision of emission units for a second Projects tender round will be made in the context of the 2004 Budget.
6. Officials are assessing possible enhancements to the value of future projects rounds for tenderers and the Government including:
 - text withheld under the OIA Section 9(2)(f)(iv);
 - facilitating the best possible market access for Project tenderers, and potentially other New Zealand based emissions units;
 - facilitating sales of New Zealand based emissions units to the Netherlands Government, a major purchaser of emissions units; and
 - ranking criteria applied to eligible tenderers.

Proposal

7. This paper reports on the outcome of the first Projects to Reduce Emissions (Projects) tender round and considers options to further enhance the value of the Projects Programme.

Background Information

8. The Projects to Reduce Emissions Programme is a key part of the Government's climate change policy package. The programme aims to contribute to achieving New Zealand's Kyoto Protocol emission obligations by providing an incentive for projects that reduce emissions below business-as-usual during the Kyoto Protocol's first Commitment Period ("CP1": 2008 – 2012).
9. The Programme is a competitive tender process administered by the New Zealand Climate Change Office (NZCCO).
10. Key features of the Projects Programme are provided in Annex 1.

Outcome of the First Tender Round

11. The first tender round was held in September and October 2003. The tender was preceded by pre-tender briefings in Auckland, Wellington and Christchurch, and 230 parties downloaded tender documents from the Government Electronic Tenders Service (GETS) website.

Tenders Received

12. The NZCCO received a very strong response to the tender – 46 tenders were received. These tenders forecast to deliver a total of 15.9 million tonnes CO₂-equivalent of emission reductions during CP1¹, and requested a total of 15.2 million emission units from the Government.
13. The tenderers comprised both private and public businesses, and the projects submitted included wind farms, hydro and [text withheld under the OIA Section 9(2)(j)] electricity projects, a significant cogeneration plant, proposals for generating electricity from landfill gas, a range of bio-fuel and bio-energy projects and schemes for waste treatment. Most of the tenders were for projects that, if implemented, would generate or reduce the demand for electricity.
14. The size of projects submitted varied considerably, from small scale projects that just met the minimum emission reduction size threshold (10,000 tonnes CO₂-equivalent of emission reductions over CP1) to a number of larger projects that forecast to produce emission reductions in excess of 1 million tonnes CO₂-equivalent over CP1.
15. From the tenders received, the size threshold did not appear to be a material barrier to entry for many project types. For example, commercial wind farms, landfill gas collection and generation projects, mini-hydro development projects and bio-energy projects would generally result in emission reductions above this

¹ Twenty-seven tenders were subsequently assessed as being ineligible. Text withheld under the OIA Section 9(2)(i).

size threshold. However, no tenders were received from a number of project types that were, in principle, capable of being eligible. This included projects involving transportation fuel choice and efficiency, transportation modal choice, energy conservation, micro-scale embedded electricity generation projects, and projects from small businesses. For these types of projects the size threshold may be a material barrier to entry.

16. Consistent with the variability of project size, capital costs associated with the projects varied considerably – 18 projects forecast capital expenditure of less than \$5 million, and five projects forecast capital expenditure above \$100 million.
17. The expected value of the emission units in the tenders varied from \$2 per unit to \$25 per unit. Across all tenders, the weighted average value was \$11.50 per unit. Typically the expected value of the emission units represented 3% – 4% of the project's capital cost.

Assessment of Eligibility

18. Following assessment by an independent assessment panel, 19 tenders were considered eligible for ranking. [Text withheld under the OIA Section 9(2)(i)]. The eligible tenders were ranked according to the approach described in Annex 1, with priority given to tenders that would contribute to near-term electricity security.

Tender Outcome

19. Final decisions on the outcome of the tender were taken by the Secretary for the Environment in December 2003 – fifteen tenders were successful in the tender process, resulting in the award of 3.989 million emission units (summarised in Table 1 below).
20. Project agreements, reflecting the terms and conditions agreed by Cabinet [CAB Min (03) 29/3 of 1 September 2003 refers] have been entered into with fourteen of the successful tenderers.

Table 1: Summary of Successful Tenders

Project Type	No of Successful Tenders	Emission units Awarded	% Awarded	Electricity Generation in 2008 (GWh)
Wind farm projects	4	1,227,414	31%	409
Electricity co-generation	1	1,225,545	31%	660
Text withheld under the OIA Section 9(2)(j)				
Electricity generation from the collection of landfill gas	2	382,749	9%	14
Text withheld under the OIA Section 9(2)(j)				
Bio-energy displacement of fossil fuels ²	2	117,978	3%	–
Total	15	3,988,709	100%	1,484

21. One tenderer, who was awarded approximately 1% of the emission units, has advised that it will no longer implement the project in the timeframe envisaged in its tender and has therefore withdrawn its tender. The NZCCO is proceeding to offer these emission units to other tenderers whose projects were eligible but were originally unsuccessful in the tender process.
22. The final outcome is dependent on discussions with the remaining eligible tenderers that were previously unsuccessful. The withdrawal of the successful tenderer and negotiations with other eligible tenderers will not impact on the outcome for electricity generation.
23. The fourteen projects have the potential to deliver at least 3.95 million tonnes CO₂-equivalent of emission reductions during CP1 and a total of 1.2 million tonnes CO₂-equivalent of emission reductions pre-CP1. The ratio of emission units requested by the successful tenderers to the CP1 emission reductions to be delivered was 1:1.
24. Thirteen of these projects will contribute to near-term electricity security – these projects are expected to produce 1,484 GWh (or 5.3 PJ) of generation in 2008. This represents almost one fifth of the 30 PJ renewable energy target under the National Energy Efficiency and Conservation Strategy and is equivalent to about two years of growth in electricity demand.
25. It is possible that the projects may not fully deliver the forecast abatement above. Most projects have potential barriers to implementation. If these are not overcome implementation could be delayed, the scale of the project could be reduced, or there is the possibility that the project would not proceed. For example:
 - The scale and timing of twelve projects is dependent on the projects obtaining satisfactory resource consents,

² One project has subsequently withdrawn.

- Three projects are dependent on the project owner negotiating a satisfactory connection agreement to the electricity grid.
26. Natural fluctuations in resources such as wind and water availability might result in a project's output (electricity generation and emissions reductions) being different to that forecast. Where additional emissions reductions are delivered during CP1 projects will only be awarded emissions units up to the level requested in the tender, therefore improving New Zealand's net emissions position during CP1. If the emissions reductions are lower than forecast the Crown will only award emissions units up to the level of emissions reductions achieved.

Comment

27. Officials are continuing to examine ways to enhance the value of the Projects Programme for future tender rounds.

Possible Enhancements for Second and Subsequent Projects Round

28. International trading to date has revealed the following regarding prices of project-based emissions trading units:
- On average there is a 34% premium on the contracted price where liability lies with the seller rather than the buyer; and
 - The "spread" between prices is very large, indicating a wide variety of assessments about projects.
29. These factors have relevance to the way an emissions trading scheme may be undertaken in New Zealand, as they suggest that the design and characteristics of project-based transactions can affect their price.
30. The European Union Emissions Trading Scheme (EU ETS) will expand significantly during 2004 and 2005. It will not be conditional on the entry into force of the Kyoto Protocol. The EU ETS is an industry/firm emissions trading scheme, currently being voted on within the European Union, with a link to Kyoto flexibility mechanisms (Joint Implementation and the Clean Development Mechanism) which could involve governments. The EU ETS offers a new and substantial market into which New Zealand based emissions units may be sold.
31. Paragraphs 31 withheld under the OIA Section 9(2)(i)
32. Paragraphs 32 withheld under the OIA Section 9(2)(i)
33. The Treasury, in consultation with the New Zealand Climate Change Office, will be conducting analysis over the next two months on these issues. This work will include analysis of:
- forward selling of assigned amount units (AAUs) in order to provide cash incentives for projects;
 - the use of insurance products to mitigate risk of non-delivery of emission reductions, so that the international buyer is not taking on all risk (as applies in the first Projects round); and

- the use of risk analysis to select portfolios of projects in association with the application of insurance products.

Maximising Market Access for New Zealand Based Emission Units

34. It is important that New Zealand based emission units are acceptable and attractive to overseas purchasers.
35. The European Union has issued a draft directive that sets out the rules around access of Joint Implementation and Clean Development Mechanism (CDM)³ credits to the EU ETS – i.e., how European firms with obligations to obtain emission allowances in the EU ETS could instead choose to meet their obligations by purchasing project based emission units under the Kyoto flexible mechanisms – including from New Zealand projects.
36. Officials from the NZCCO and the Ministry of Foreign Affairs and Trade intend to hold discussions with the European Commission in April to ensure that access of New Zealand project-based units into the EU ETS is maximised.

Collaboration with the Netherlands

37. In December 2003, Meridian Energy's 90 MW Te Apiti wind farm was offered a contract to sell the emission units from its early Project Agreement to the Netherlands Government's ERUPT⁴ programme. The ERUPT programme offers up-front advance payment for a portion of units allocated, and payment is not conditional on the entry into force of the Kyoto Protocol. The average price paid in the last ERUPT round (ERUPT-3) was 5.5 Euros per tonne of CO₂-e.
38. The NZCCO has been approached by Senter, the Netherlands's government agency responsible for the ERUPT programme, to investigate the possibility of contracting further greenhouse reduction projects from New Zealand. Senter were generally impressed with the first tender process and contracting arrangements.
39. Officials from the NZCCO are exploring with Senter how projects awarded emission units under the Projects programme could make better use of the ERUPT tender process, providing more certainty for participants in the Projects programme.

Ranking Approach

40. To rank and award emission units to projects on the basis of "maximum-return" for the Crown, the first round tenderers could request emission units up to a maximum of the emission reductions expected from the project in CP1. The relative ranking of each tender was determined by the project's core criterion (the smaller the ratio, the higher the ranking of the tender), calculated as follows:

3 The mechanisms created under the Kyoto Protocol for the generation of project-based emission credits in developed and developing countries respectively.

4 ERUPT is the Emissions Reduction Unit Procurement Tender programme of the Netherlands Government, which provides a mechanism for it to buy credits to offset its Kyoto Protocol obligations from companies which carry out projects in other countries that reduce greenhouse gas emissions.

$$\text{core criterion} = \left(\frac{\text{Number of emission units requested by the tenderer}}{\text{Total tCO}_2\text{-e reductions from the start of the project to 2012}} \right)$$

41. The ranking approach was intended to create competition among tenderers, with the result that tenderers would request less than the projects' emissions reductions to improve their ranking.
42. New Zealand's Kyoto position during CP1 will be improved through awarding further emissions units in future Projects tender rounds if:
 - fewer emissions units are awarded than the emissions reductions achieved; and
 - projects in total deliver more emissions reductions than estimated.
43. It is likely the ranking approach had some impact on the outcome that tenderers requested the maximum number of units, because:
 - Tenderers for electricity generation projects may have perceived that the focus on near-term security of New Zealand's electricity supply meant the core criteria would not affect the outcome of their project tender.
 - The recognition of early emission reductions also acted as a bias against larger projects that would take longer to construct.
44. In addition to the ranking approach a number of factors may have influenced the bidding behaviour of the tenderers in the first Projects round including:
 - Tenderers bear a number of risks in the Projects Programme and may have requested the maximum available units to mitigate uncertainty around the market values of emissions units.
 - This was the first tender round and tenderers may have believed it would be undersubscribed.
 - Emissions units represent a small proportion of project capital costs. To demonstrate a project's investment additionality the maximum number of emissions units may have been requested.
45. Consideration of pre-CP1 emission reductions and the priority to projects that contribute to the near-term security of New Zealand's electricity supply as part of the ranking approach, appear to detract from the underlying objective of awarding emission units to projects on the basis of "maximum-return" for the Crown.
46. To increase competition between tenderers and deliver maximum emissions reductions at "maximum-return" for the Crown officials will continue to examine the ranking criteria and make recommendations to Minister of Finance, and the Convenor, Ministerial Group on Climate Change prior to the next tender round.

Financial Implications

47. A decision on the provision of emissions units for a second Projects tender round will be made in the context of the 2004 Budget.
48. Funding for the NZCCO to administer subsequent Projects tender rounds can be met from the existing baseline within Vote: Climate Change and Energy Efficiency.

Consultation

49. The Treasury, the Ministry of Economic Development, the Ministry of Agriculture and Forestry, the Ministry of Foreign Affairs and Trade, the Department of Prime Minister and Cabinet, the Ministry of Transport and the Energy Efficiency and Conservation Authority were consulted.

Cabinet Decisions

1. **noted** that in August 2003, the Cabinet Policy Committee agreed to the details of Model Project Agreements under the Projects to Reduce Emissions programme (PRE), and directed officials to report back to Cabinet Policy Committee by February 2004 on the progress of the first tender round [POL Min (03) 21/7];
2. **noted** that in the first tender round, there were tenders for 46 different projects, that contracts were offered to 15 successful projects, and 14 have been signed. These projects in total are forecast to reduce greenhouse gas emissions by nearly 4 million tonnes of CO₂ equivalent during the first commitment period of the Kyoto Protocol (2008-2012) (CP1). Further an additional 5.3 petajoules PJ of renewable electricity generation is expected to be provided by these projects. This is equivalent to about two years of growth in electricity demand;
3. **noted** that one successful project tenderer has withdrawn and officials are proceeding to offer these emission units to other tenderers whose projects were eligible but were originally unsuccessful in the tender process;
4. **noted** that while the numbers of tenderers in the first tender round exceeded expectations, and the allocation of 4 million units was fully subscribed, the volume of emissions reductions offered in return, at 4 million tonnes of CO₂ equivalent, was the lowest volume possible under the programme's eligibility criteria;
5. **noted** that, while the projects contracted in the first tender round will achieve significant environmental benefits, unless they deliver, in total, more emission reductions than were contracted for, they will not contribute towards an increase in New Zealand's net emissions position during CP1;
6. **agreed** that the government should seek to achieve a "maximum-return" for the Crown in any subsequent Projects tender rounds by delivering greater emission reductions than the emissions units allocated;
7. **noted** that the recognition of emission reductions prior to CP1, and the application of near term electricity security as selection criteria, may have contributed towards almost all tenderers bidding for one unit for every tonne of emission reductions

achieved, and the overall result for the tender round referred to in paragraph 4, above;

8. **directed** officials from the Climate Change Office, the Treasury, and the Ministry of Economic Development, to report to the Minister of Finance, and the Convenor, Ministerial Group on Climate Change, on the retention of the selection criteria referred to in paragraph 7, above, prior to any second or subsequent tender rounds;
9. **authorised** the Minister of Finance, and the Convenor, Ministerial Group on Climate Change, to determine whether to retain the selection criteria referred to in paragraph 8, above, prior to any second or subsequent tender rounds, following the receipt of the report from officials referred to in paragraph 8;
10. **noted** that a decision on the allocation of emission units for a second and subsequent Project tender rounds will be taken by Budget Ministers, and submitted to Cabinet for consideration in the context of the finalisation of the 2004 Budget;
11. **noted** that it is important that New Zealand based emission units are acceptable and attractive to overseas purchasers;
12. Paragraph 12 withheld under the OIA Section 9(2)(i);
13. **noted** that officials from the Climate Change Office, and the Ministry of Foreign Affairs and Trade intend to hold discussions with the European Commission in April to ensure that access of New Zealand project-based units into the EU ETS (European Union Emissions Trading Scheme) is maximised;
14. **noted** that officials from the Climate Change Office, and the Ministry of Foreign Affairs and Trade are discussing the design of PRE with officials from the Government of the Netherlands, a major purchaser of carbon, to ensure any barriers to the purchase of emissions units by the Netherlands Government are minimised;
15. **noted** that officials will report to the Minister of Finance, and the Convenor, Ministerial Group on Climate Change, on the outcome of the work programmes in paragraph 12-14, prior to the finalisation of the design of any second, or subsequent Projects tender rounds;
16. **noted** that, subject to a decision in the 2004 Budget context on the allocation of emission units for a second and subsequent Projects tender rounds, as referred to in paragraph 10, above, the Minister of Finance, and the Convenor, Ministerial Group on Climate Change will report to the Cabinet Policy Committee, if necessary, seeking agreement to any recommended changes to the design of the Projects Programme, except for those where they are authorised to make decisions, as referred to in paragraph 9;
17. **noted** that the Climate Change Office intends to make the paper attached to POL (04) 73 public, subject to requirements under the Official Information Act;

Consultation

18. **noted** that the Convenor, Ministerial Group on Climate Change indicates that consultation is not required with government or other parliamentary parties.

Hon Pete Hodgson
Convenor, Ministerial Group
on Climate Change

Hon Dr Michael Cullen
Minister of Finance

Projects to Reduce Emissions-Key Features

Nature of the Incentive

1. A successful tenderer enters a contract with the Government, to receive Kyoto Protocol compliant emission units in return for emission reductions delivered by their project during CP1.
2. Under the Kyoto Protocol, there are four different types of units, each equivalent to a tonne of CO₂-equivalent. The emission units being transferred by the Crown under Projects will be either Assigned Amount Units⁵ (AAUs), or if the participant meets the criteria for allocation of Emission Reduction Units⁶ (ERUs), the participant can elect to receive ERUs.
3. The emission units will be transferred to participants following the delivery of emission reductions by the project in each year of CP1. The first emission units will not, therefore, be delivered until early 2009.
4. The emission units cannot be used in New Zealand to offset any other domestic policy measure such as the emissions charge. However, they are expected to be internationally tradeable when the Kyoto Protocol comes into force. Participants are able to “forward sell” their award of emission units, and this has already happened in respect of Meridian Energy’s Te Apiti wind farm, with the emission units from the project being sold to the Netherlands Government.
5. The Crown’s agreement with project participants will be terminated should the Kyoto Protocol does not enter into force.
6. For the first Projects tender round, a pool of 4 million emission units was available.

Eligibility

7. Key determinants of eligibility are:
 - Satisfying “additionality” tests – without the incentive of emission units, the project would not proceed in the timeframe proposed on a “business-as-usual” basis, but would proceed with the incentive;
 - Passing an emission reduction size threshold of 10,000 tonnes CO₂-equivalent over the five years of CP1 (2008 – 2012);
 - The number of emission units requested by the tenderer must be no greater than the emission reductions expected to be generated by the project in CP1.

⁵ AAUs are New Zealand’s original allocation under the Kyoto Protocol, based on 1990 emission levels.

⁶ ERUs are project-backed units that satisfy the international requirements for Joint Implementation projects.

Tender and Selection Process

8. The New Zealand Climate Change Office administered the first tender round, including the tender evaluation. Tenderers bid in with details of the proposed project, the amount of emission reductions that would be achieved and the number of emission units requested.
9. Tenders were assessed to determine whether they passed investment and environmental additionality tests⁷. The risks associated with each tender were also considered as part of the assessment process.
10. Priority in negotiation and assessment of projects was afforded to larger proposals that contribute to electricity security [POL Min (03) 6/4 of 20 March 2003 refers]. This was given effect by electricity supply tenders being ranked ahead of other eligible tenders.
11. The relative ranking of each tender within electricity security projects and within non-electricity security projects was calculated according to a project's "core criterion" (The smaller the ratio the higher the ranking of the tender).
12. Emission units were allocated in accordance with this ranking up to the project maximum of the four million available in the first tender round.

⁷ ***Investment additionality*** tests whether the project would proceed under usual investment assumptions ("business-as-usual") in the absence of any financial incentive.

Environmental additionality assesses whether the project achieves real net emission abatement beyond "business-as-usual".