

## Regulatory Impact Statement:

### **Emissions Trading Scheme: Regulations for the carry-over of Kyoto units from the first Kyoto Protocol commitment period**

#### **Agency Disclosure Statement**

This Regulatory Impact Statement has been prepared by the Ministry for the Environment. It provides an analysis of options for the carry-over of Kyoto units in the New Zealand Emissions Trading Scheme (ETS). Responding to a request by the Minister for Climate Change Issues, Cabinet gave approval to consult on the following options for the carry-over of Kyoto units:

Consultation issue one: Certified Emission Reductions (CERs) and Emission Reduction Units (ERUs)

- To not allow individual account holders in the NZEUR to carry over CERs or ERUs
- To allow individual account holders in the NZEUR to carry over CERs or ERUs

Consultation issue two: Assigned Amount Units (AAUs)

- To automatically apply to carry over NZ AAUs on behalf on individual account holders

Submitters were invited to propose other options; no feasible alternative options were put forward. One submitter suggested allowing unlimited carry-over of units, however this is not an option for New Zealand, as the restriction on carry-over is placed on it by the international rules governing carry-over.

Officials acknowledge difficulty in firmly quantifying the impact that the various options might have. Information was sought from submitters which would enable a better assessment of potential impacts, however, no specific quantitative information was offered. The information received was of a general nature, and indicated that the potential impacts of the Government's preferred options would be limited.

Compared to the status quo the preferred options will provide the market with a greater degree of clarity and certainty, and do so in a way which will not have any adverse impacts on equity, clarity, or environmental integrity. The proposed options are likely to minimise the risk of loss to participants due to any potential mandatory cancellation of first commitment period Kyoto units upon completion of the international true-up period.

Pauline Doherty, Acting Director, Climate

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## STATUS QUO AND PROBLEM DEFINITION

### Background

#### *The Kyoto Protocol*

1. New Zealand is a party to the Kyoto Protocol and took a target for the first Kyoto commitment period (CP1).
2. Several types of emission units (Kyoto units) have been created under the Kyoto Protocol to facilitate international emissions trading between parties. These units are:
  - *Assigned Amount Units (AAUs)*: Assigned to countries under the Kyoto Protocol
  - *Certified Emission Reduction units (CERs)*: Generated under the Kyoto protocol by Clean Development Mechanism (CDM) projects that reduce emissions in developing countries
  - *Emission Reduction Units (ERUs)*: Generated under the Kyoto Protocol by carrying out Joint Implementation (JI) emissions reduction projects that occur in countries with an inscribed emissions target (parties listed in Annex B to the Kyoto Protocol)
  - *Removal units (RMUs)*: Kyoto units generated from forestry activities.
3. Under the international emissions trading system, these units are only eligible for a specified Commitment Period. CP1 ran from 1 January 2008 to 31 December 2012. After this period, and following reporting and international review of each party's emissions, each party must retire a number of Kyoto units equivalent to their emissions over the commitment period. Any surplus units may, subject to some restrictions, be "carried-over" so that they remain eligible for a subsequent commitment period. The timing of this carry-over is yet to be confirmed but is expected to occur no earlier than May 31, 2015, and likely prior to May 31, 2016.
4. Under the Kyoto Protocol there are rules pertaining to the carry-over of these units ("the international carry-over rules"). The following rules on carry-over apply:
  - AAUs can be carried over without limitation
  - CERs and ERUs may each be carried over up to a quantity equal to 2.5 percent of a Party's initial assigned amount. In New Zealand's case, this amounts to roughly 7.75 million each of CERs and ERUs
  - any units issued on the basis of a forestry activity may not be carried over. In practice, this means that RMUs and ERUs converted from RMUs may not be carried over.
5. The international carry-over rules only apply to Kyoto units. New Zealand Units (NZUs) are not affected.

6. As a party under CP1, New Zealand is bound by the international carry-over rules. The decision not to take a commitment for the second commitment period (CP2) may have implications for New Zealand's ability to carry over units in accordance with these rules as a party to the Kyoto Protocol.
7. At the Doha conference, Kyoto Protocol parties made decisions regarding the carry-over of units with reference to parties who took their commitment under the second commitment period of the Kyoto Protocol. The Doha decisions remained silent on whether or not parties who elected not to inscribe their target under the second commitment period of the Kyoto Protocol (such as New Zealand) would in fact be able to apply to carry over Kyoto units at all. This means New Zealand does not have complete clarity on the ability to carry over any units and this may not be known for some time.

### *Implications for the New Zealand Emissions Trading Scheme*

8. To help New Zealand meet its international Kyoto Protocol obligations, the New Zealand Emissions Trading Scheme (ETS) was enacted through the Climate Change Response Act 2002 (the Act). The ETS requires participants to meet their obligations by surrendering emission units. Participants can surrender, subject to some restrictions, either domestic units (NZUs) or international units generated under the Kyoto Protocol.
9. In order to acquire these units for surrendering, participants must open an account in the New Zealand Emission Unit Register (NZEUR), into which these units may be placed. Because the international rules relating to carry-over apply on a national registry-wide level, they apply to any Kyoto units held in the NZEUR. This includes units held in individual, non-Crown accounts.
10. Section 16 of the Act states that individual account holders may, subject to regulations, apply to carry over CERs, ERUs, and AAUs from one commitment period to a subsequent one. The Act also states that RMUs may not be carried over.
11. The regulations governing the conditions under which CERs, ERUs, and AAUs may be carried over have not yet been made. This means there is a lack of certainty in the ETS about the degree to which these units may be carried over. This creates uncertainty for individual account holders and market intermediaries as to what will happen to the units in their accounts which have not been formally carried over. There is a possibility they may be mandatorily cancelled under the international carry-over rules.
12. Regulations relating to carry-over can be made under section 30G(1)(d), which provides for:

Prescribing matters in respect of the carry-over of assigned amount units, certified emission reduction units, and emission reduction units, including (but not limited to) limitations, restrictions, conditions, exemptions, requirements, procedures, or thresholds.
13. Section 16 already specifically precludes RMUs from being carried over. Therefore no new regulations need to be made in respect of these units.

14. With respect to the other Kyoto units (AAUs, CERs, and ERUs) the different rules pertaining to the carry-over of these units means that there are different levels of complexity in assessing which options to consider with respect to making regulations governing domestic carry-over of these units. In our consultation document, we presented these as Consultation Issue 1 (carry-over of CERs and ERUs) and Consultation Issue 2 (carry-over of AAUs).
15. The international rules applying to the carry-over of CERs and ERUs allow carry-over up to a certain amount. This introduces a degree of complexity in the decision of whether or not to devolve this ability to individual account holders, as any decision to do so involves consideration of how this restricted entitlement could be distributed or allocated among affected account holders.
16. The international rules place no restriction on the carry-over of AAUs.

### Status quo

17. The international carry-over rules will apply whether or not New Zealand reflects them in the domestic legislation. This means any Kyoto units not formally carried over will be subject to mandatory cancellation even if they are held in the NZEUR by private individuals. This will occur after true up in 2015 or 2016.
18. The legislation establishes the right to apply to carry over, but requires regulations to be made to specify either:
  - that individual account holders be able to carry over Kyoto units, and specify the manner in which this should take place
  - that individual account holders not be able to carry over Kyoto units.
19. Because regulations are required under the Act to provide clarity as to which approach will apply, the status quo is therefore unclear and ambiguous until such regulations are made. A non-regulatory option has therefore been discarded.

### Problem definition

20. There are over 9,000 account holders in the New Zealand Emission Unit Register (NZEUR) who could potentially be affected by this current ambiguity. Those most affected are likely to be the approximately 200 participants with direct surrender obligations in the ETS and carbon market intermediaries such as traders and banks. The scale of the problem is not significant on a national level, but is significant in terms of market confidence in the ETS.
21. If the Government's approach to application of the international carry-over rules is not clarified through regulations, the continued lack of certainty could result in risk of loss to individual account holders.
22. This risk of loss is due to the possibility that without clear regulations, ETS market participants may purchase units on the assumption that they will be able to be carried

over, and subsequently have them be subject to mandatory cancellation under the international carry-over rules.

23. Information from brokers, bankers, participants and market observers suggests that most purchase their units on a one to three year horizon. If they are unsure whether or not CP1 Kyoto units will be able to be carried over, they may either:

- Purchase units that could subsequently be subject to cancellation, resulting in financial loss
- Make unit trading decisions based on incorrect/imperfect information, leading to a degree of market failure

24. It is essential therefore that regulations are made which provide ETS market participants with a degree of certainty and clarity, in order to allow them to make mid- to long-term decisions and minimal risk of loss.

## OBJECTIVES

25. The proposal to develop carry-over regulations has the following objectives:

1. To increase certainty for the eligibility of CP1 Kyoto units in the ETS. This will provide market participants with the necessary information to make long-term business decisions, maximise efficiency, and minimise the risk of financial loss.
2. The carry-over regulations must be written so they can be applied equitably, in a manner which is transparent and which maintains the environmental integrity of the ETS.

## Assessment criteria

26. In order to meet the objectives, the following criteria should be met:

- efficiency – adopt and maintain only regulations for which the costs on society are justified by the benefits to society
- effectiveness – regulation should be designed to achieve the desired policy objectives
- transparency – the regulation-making process should be clear
- clarity – regulatory processes and requirements should be as understandable and accessible as practicable
- equity – regulation should be fair and treat those affected equally
- environmental Integrity – the environmental integrity of the ETS should be maintained.

27. Regulations must also be consistent with New Zealand's international obligations.

## OPTIONS

### Consultation Issue 1 – carry-over of CERs and ERUs

28. Two options have been considered for devolving New Zealand's limited entitlement to carry over CERs and ERUs to individual account holders. They are:
- A. individual account holders are not able to carry over CERs or ERUs at all
  - B. individual account holders are able to carry over CERs and ERUs up to the maximum set in the international rules.

#### *Option A – no carry-over of CERs and ERUs*

29. Under Option A, individual account holders would be unable to carry over any of their CERs or ERUs. This means they would have to surrender or sell all their CP1-eligible Kyoto units before the Government's carry-over notification date (estimated to occur in mid-2015).
30. Participants would have three surrender periods when they would be able to surrender CERs and ERUs. Any CERs or ERUs remaining in the NZ EUR after the carry-over date would be cancelled.

#### *Option B – CERs and ERUs able to be carried over*

31. Under Option B, the Government would extend New Zealand's CER and ERU restricted carry-over entitlement to individual account holders, to the maximum extent allowable by the international carry-over rules (15.5 million units, or approximately 80 per cent of the anticipated total ETS surrender obligation for 2016).
32. If this option was pursued, then consideration would need to be given to the design of a system to ensure the limited ability to carry over CERs and ERUs was allocated consistently and fairly. There are a range of alternatives to determine how this is implemented. These include:
- queuing (ie, first-come, first-served basis)
  - pro rata (eg, based on the previous year's emissions)
  - targeted (ie, the Government will decide which sectors are eligible to apply for carry-over)
  - auctioning entitlements (ie, carry-over entitlements are sold by the Government in a competitive bidding process).

### Implementation Options

33. Some work on assessing the viability of these implementation options has been carried out, and is summarised in the table below:

Implementation Option	Benefits	Costs	Estimated implementation cost
Queuing	• Low	• Significant equity	• Minimal

	implementation cost	issues <ul style="list-style-type: none"> <li>• Inefficient</li> <li>• Prolongs uncertainty and raises risk of loss to market participants</li> </ul>	(<NZ\$10,000)
Pro rata	<ul style="list-style-type: none"> <li>• Low implementation cost compared to auctioning of entitlements</li> </ul>	<ul style="list-style-type: none"> <li>• Exposes account holders to risk of loss (in the event they have purchase CERs or ERUs and are unable to use following pro rating)</li> <li>• Significant equity issues – difficult to allow for those who may have liabilities in the future but none at present, new entrants to the scheme, market participants (eg financial intermediaries) who do not have surrender obligations</li> <li>• Prolongs uncertainty and raises risk of loss to market participants</li> <li>• Inefficient – those who receive an allocation based on pro rata may not avail themselves of it, meaning the limited ability to carry over may not be fully utilised</li> </ul>	<ul style="list-style-type: none"> <li>• Low (&lt;NZ\$50,000, mostly policy development)</li> </ul>
Targeted	<ul style="list-style-type: none"> <li>• Presents opportunity to reinforce ETS policy objectives</li> </ul>	<ul style="list-style-type: none"> <li>• Costly – involves significant policy work to determine on what basis the targeting should take place</li> <li>• Significant equity issues</li> <li>• Prolongs uncertainty and raises risk of loss to market participants</li> </ul>	<ul style="list-style-type: none"> <li>• Low (&lt;NZ\$50,000, mostly policy development)</li> </ul>
Auctioning	<ul style="list-style-type: none"> <li>• Highest allocative efficiency</li> <li>• No issues of equity</li> <li>• High implementation cost</li> </ul>	<ul style="list-style-type: none"> <li>• Could be seen as revenue raising</li> <li>• Minimises already marginal benefit of being able to carry-over (as have to pay for the right)</li> <li>• Expensive to implement;</li> </ul>	<ul style="list-style-type: none"> <li>• Moderate (NZ\$100,000-200,000 if designed as stand-alone)</li> </ul>

		<p>implementation cost could be mitigated by adding to a broader auctioning function, however no decisions have been made on design or timing of auctioning in the ETS</p> <ul style="list-style-type: none"> <li>• Prolongs uncertainty and raises risk of loss to market participants</li> </ul>	
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34. In submissions received where a preference for implementation options was expressed, the following was noted:

- No submitters supported Targeted allocation
- No submitters supported the Auctioning method of allocation
- Some submitters expressed support for the Queuing method of allocation, proposing that New Zealand's carry-over entitlement was unlikely to be exceeded. However, they acknowledged that if there was greater demand, then another system would need to be devised to ensure allocation was implemented fairly.
- There was general support for a Pro rata method of allocation. Proposed bases for pro rating included a previous year's surrender obligation, and a previous year's account holdings. Submitters in different situations expressed preferences for different methods of pro rating, highlighting significant equity issues.

35. Officials consider the Auctioning method provides the greatest levels of equity and allocative efficiency. However, the very fact that participants would have to bid for the ability to carry over would undermine any potential, already limited benefit of being able to carry over. In addition, auctioning could be costly to develop and implement for the sole purpose of allocating carryover. Though it may be possible to incorporate this into a broader auctioning function being considered by the Government. However no decisions have been made on whether an auctioning function should be introduced within the ETS. If the Government decided to introduce auctioning, it may not be operational prior to the May 31 2015 surrender deadline.

#### General notes on implementation options

36. If Option B were preferred, then considerable time would need to be spent on fleshing out the details of potential implementation options, and would likely need to be the subject of further consultation and engagement with market participants. This would result in a greater period of uncertainty for market participants, and raise the risk of loss owing to participants purchasing units that may subsequently be subject to cancellation.

37. The international carry-over rules mean that a maximum of 7.75 million CERs and a maximum of 7.75 million ERUs may be carried over. This means any such process would need to be run twice – once for CERs, and once for ERUs. This would add to uncertainty for market participants (as they would be uncertain whether to purchase

CERs or ERUs), raise the risk of loss, and raise the cost of implementation and administration.

38. Regardless of which implementation option was eventually settled upon, there are risks associated with equity, cost, and efficiency. In addition, the delay in providing the market with the necessary certainty to provide market participants with the information needed to make sound mid- to long-term decisions and minimise the risk of loss runs counter to the primary objective.
39. Because the international carry-over rules set such significant restrictions on the carry-over of CERs and ERUs, either option has a significant impact on individual account holders' ability to carry over CERs and ERUs.

## OPTIONS ANALYSIS

40. The status quo, ambiguous as it is, carries with it significant risk of loss to individual account holders due to the potential for mandatory cancellation of CP1 Kyoto units. It is also responsible for continuing uncertainty with regard to the eligibility of CP1 Kyoto units in the ETS beyond 31 May 2015, as the carry-over rules are currently not set in the regulations. When assessing the options using the evaluation criteria, we are therefore assessing Option A against Option B, as both are preferable to the status quo.
41. A summary of this analysis, together with a summary of regulatory impacts of each option, is presented in Table 3 (below paragraph 82).
42. Efficiency: Option A places the least burden on the taxpayer. The resources required to write regulations based on Option A would require minimal time and effort compared to Option B. The cost to the taxpayer of implementing Option B would depend on the actual system implemented. There would be some cost in progressing work on which system to pursue, and then subsequent development and implementation costs.
43. Effectiveness: Option A would meet both objectives to the fullest extent. While Option B would also meet both objectives to an extent, the extra time needed to fully develop a preferred distribution system under this method would delay the ability to provide certainty to the market. It would also be difficult to apply the distribution fairly and equitably, in a manner which takes into account all affected account holders.
44. Transparency: Both options would allow the regulation-making process to be clear and transparent.
45. Clarity: Regulatory processes and requirements would be clearest under Option A, as it is the simplest option. Although it would depend on the specific distribution system, clarity would, to some extent, be compromised by any of the systems outlined above under Option B. The extra time required to settle upon a suitable implementation option for Option B would also result in delay before clarity could be provided to market participants.

46. Equity: Option A provides the greatest guarantee of equity across all individual account holders, as it would apply equally to all. There are issues of equity under all of the proposed distribution systems under Option B. It would be difficult to ensure all account holders –including new entrants, those with surrender obligations varying from year to year, foresters who may only have deforestation obligations years from now, and those account holders who are not direct ETS participants – are accounted for fairly and equitably.
47. Environmental integrity: Both options would rate equally for environmental integrity. Although there may be some perceived differences in the environmental integrity of each option, either option would result in the same number of greenhouse gas emission reductions.

## Conclusion

48. Based on the above analysis, the Government's preferred approach is to adopt Option A: to not extend the international carry-over entitlements to individual account holders.
49. Fully developing a system under Option B that would meet the evaluation criteria set out above would likely involve some cost to the taxpayer. Further consultation would likely be necessary before a preferred method was selected. The lack of clarity around New Zealand's ability to formally carry over these units through the UN process creates an additional risk. On balance, the Government considers these costs and risks of allowing individual account holders to carry-over CERs and ERUs outweigh the potential benefits accruing to individual account holders.

## IMPACT ASSESSMENT

50. The impact of Option A to ETS participants with surrender obligations could be calculated as either an opportunity cost (ie, not being able to carry over would preclude them from taking the opportunity to purchase cheaper units in the future), or a transaction cost (ie, they have purchased more units than they could surrender over the next three years, and would need to sell those excess units now and purchase replacement, non-Kyoto units that would remain eligible for surrender post-31 May 2015).
51. This should be weighed against the impact of regulatory uncertainty owing to the extra time required for further engagement with market participants, another round of consultation, and consequent drafting and passing of potentially complicated regulations to allow carry-over, and subsequent implementation phase. It could be a further 12 months before a process is implemented by which participants have absolute certainty over the quantum of units they are able to carry over. Though equally difficult to quantify with any degree of certainty, this would be measured by:

- The risk that participants delay making decisions on which units to purchase, and any subsequent additional cost of units owing to that delay (eg through prices rising in the intervening period)
- The risk that participants 'over-purchase' units which, regardless of the outcome of these regulations, are subject to cancellation under the international carry-over rules (eg participants purchase more units than they are able to surrender or carry over).

### Opportunity cost

52. The costs or benefits to individual NZEUR account holders of whether or not to allow New Zealand's limited ability to carry over CERs and ERUs to them are difficult to quantify. It would depend on two factors:

1. *Amount of units:* The number of CERs or ERUs they would have otherwise been able to carry over to surrender for obligations out to 2020
2. *Price differential:* The difference between the cost of the unit they would have been able to carry over, and the cost of a unit eligible for surrender post-31 May, 2015

#### *Amount of units*

53. Across the whole of the ETS, the projected surrender obligation for the period 2013-2020 is approximately 170 million units. Were the restricted entitlement to carry-over CERs or ERUs not devolved to individual account holders, participants could still use 60 million CP1 Kyoto units to meet their collective obligations through to 2020 (by surrendering these units in 2013, 2014, and 2015). Under the alternative, they would be able to use 75.5 million (by carrying over 15.5 million units) through to 2020.

54. Devolving New Zealand's restricted entitlement to carry over CERs and ERUs to individual account holders would only increase their ability to use CP1 Kyoto units to meet their obligations out to 2020 by approximately 9 percent more than if no carry-over were allowed (or 15.5 million units carried over out of a total projected obligation of 170 million).

#### *Price differential*

55. The price differential would depend on the cost of the next cheapest unit that would be eligible for surrender post-31 May 2015. The global carbon market is volatile, and prices are difficult to predict with any certainty.

56. ETS participants are currently (as at 1 September 2013) able to purchase ETS-eligible ERUs for NZ\$0.38. They are able to purchase ETS-eligible CERs for NZ\$1.10. A participant who can pre-purchase these units and carry them over might achieve a financial benefit which depends on the price differential between these and the next cheapest eligible unit.

57. As a result of decisions taken by the international community at Doha, it seems as though market participants' ability to access CP2 Kyoto units will be severely curtailed.

Eligible units will be available through a range of different supply mechanisms, which could include auctioning of NZUs and continued access to CERs through primary investment in the CDM. Decisions around timing and implementation of these potential alternative sources have yet to be finalised. The price differential is therefore difficult to determine at this stage.

58. It is difficult to forecast the future price of units in the international market. However, the consensus among market observers appears to be that the international market will remain over-supplied out until 2020. The likelihood of a significant increase in prices between CP1 Kyoto units and CP2 Kyoto units (which ETS participants would have access to through direct participation in the CDM) therefore appears to be low.

59. However, as decisions around auctioning and access to primary CDM have yet to be finalised, a more conservative approach would be to calculate the price differential based on a scenario where NZUs are the only unit eligible for surrender, and there is no auctioning. A market participant would be able to purchase these units now at a price of roughly NZ\$4.50<sup>1</sup>.

CP1 unit (offer price as at 8/10/13)	NZU (offer price as at 8/10/13)	Price differential	Volume of units	Opportunity cost
CER – NZ\$1.10	NZ\$4.50	NZ\$3.40	7.75m	NZ\$26.35m
ERU – NZ\$0.38	NZ\$4.50	NZ\$4.12	7.75m	NZ\$31.93m
			Total	NZ\$58.28m

### Transaction costs

60. Where a participant may have purchased or contracted for more units than they could surrender prior to the true-up period, there would be an additional transaction cost involved in the unwinding of their positions (ie selling the excess CP1 Kyoto units and purchasing new units which would be eligible for surrender after the true-up period).

61. Based on current transaction costs offered by market intermediaries in the ETS, this cost is likely to be in the order of NZ\$0.10 to NZ\$0.20 per unit (whether factored in to the bid/offer spread or charged as a separate brokerage). This would be added on to the price differential as calculated above.

62. Approximately 5% of all ETS participants may be in this situation. However, the impact of these regulations on this class of participants is likely to be minimal, as the international carry-over rules mean that they would in any event be unlikely to be able to carry over the majority of their CERs or ERUs.

63. It is difficult to determine the extent to which ETS participants may have transaction costs, as the number of units contracted for forward delivery is not known. In a worst-case scenario, where 100% of ETS participants had purchased units on the assumption that the maximum carry-over would be devolved, and paid a transaction cost of NZ\$0.20

<sup>1</sup> Provided by Westpac New Zealand as at 8 October 2013.

per unit to unwind from those positions, this would result in a cost NZ\$3.1m across all ETS participants. However, based on information received through submissions, the actual number is likely to be far lower.

64. On the basis of submissions (where no submitters had purchased more units than they would be able to surrender over the next three surrender periods), it appears likely that the vast majority of any impact to ETS participants should be classed as an opportunity cost, and that additional transaction costs would be minimal.

### Impacts of regulatory uncertainty

65. Officials have considered the impacts that may occur should regulations be delayed in order to develop alternative options for carryover.

66. With delayed certainty over the quantum of units they are able to carry over, participants face two choices:

1. Delay making any purchase of units, whether they be NZUs, CERs, or ERUs
2. Purchase international units, with no degree of certainty over whether or not they will be able to carry them over.

67. If the participant chooses to delay purchasing any units, there would be a risk that the price of those units change in the intervening period – in which regulatory uncertainty has led to a cost on the participant. It is difficult to determine to what extent that risk could materialise, as it would depend on several variables.

68. None of the submitters believed the second option was desirable, and none have entered into this position. This does not preclude the possibility that some participants may. Any units that were purchased on the basis that they would be able to be carried over and were subsequently 'scaled back' would result in direct financial loss, to the value of the units purchased and cancelled.

69. From the market's perspective, ongoing regulatory uncertainty is likely to a) limit trading and investment activity, b) reduce liquidity in the Emissions Trading Scheme, and c) lead to sub-optimal investment decisions in some cases where ETS participants have incomplete regulatory information. Therefore officials have recommended providing regulatory certainty, where possible.

## Information received through submissions

70. The NZEUR keeps track of account holders' unit holdings. However, the NZEUR administrators are not able to determine to what extent any units may have been purchased on a forward basis. The consultation document acknowledged that there were limitations to officials' ability to obtain information that would enable them to properly quantify the impacts of Option A or Option B. The consultation document therefore explicitly sought information from any participants that might enable them to better assess the impacts. No submitters provided any such information. However, it should be noted that of the seven submitters who supported Option B:

1. Three submitters (major emitters, together responsible for 20% of ETS surrender obligations for the 2012 year) stated that Option A would have no impact on them, or that they would be able to manage the impact
2. Two submitters stated that Option A would expose them to significant loss, but that they had not purchased more Kyoto units than they could use to meet their surrender obligations over the next three surrender periods (owing to uncertainty over carry-over). This would imply that any loss would be due to the loss of opportunity to purchase additional least-cost units, rather than due to having to unwind out of previously-established positions.
3. Two submitters represented business or industry groups, and did not have direct obligations. One of these submitters stated that the majority of their members had not purchased more units than they could surrender over the next three years.

## Other considerations

71. On the basis that there are fewer CERs and ERUs in the NZEUR than needed to meet surrender obligations for the next three surrender deadlines (23.9 million units with a total surrender obligation over the three surrender deadlines of roughly 60 million units), and acknowledging that no submitters said they had purchased or contracted for more CP1 Kyoto units than they could surrender over the next three surrender deadlines, we have to assume that should carry-over be allowed, this would result in an additional purchase of 15.5 million Kyoto units. The cost of these units would flow offshore, resulting in a net loss to the New Zealand economy of approximately NZ\$11.7m (7.75m x 1.10 (for CERs) plus 7.75m x 0.38 (for ERUs)).

72. Some ETS participants (pre-1990 foresters with deforestation obligations, and Emissions Intensive and Trade-Exposed participants) have been receiving NZUs as allocations, and been able to sell these and purchase CP1 Kyoto units to meet their obligations at a far lower cost. The financial benefits of pursuing this strategy would go some way to mitigating any potential opportunity costs these participants would otherwise face due to Option A being implemented.

## Conclusion

73. A summary of the assessment of the two options against the evaluation criteria is set out in Table 3 below. It includes an individualised assessment of the various implementation options of Option B (to allow individual account holders to carry over CERs and ERUs). None of these options were able to satisfy all the evaluation criteria. Option A (to not allow individual account holders to carry over CERs and ERUs), on the other hand, meets the objectives while satisfying all evaluation criteria.
74. The exact impact on individual account holders of pursuing Option A is difficult to quantify. However, the majority of submitters said that Option A would have no impact, or that they would be able to manage the impact. No submitters had purchased more units than they would be able to surrender over the next three surrender deadlines. This would imply that almost all of the potential impact should be categorised as opportunity cost, rather than the cost of unwinding previously established positions.
75. The risk of delayed certainty owing to the extra time needed to design and implement a system whereby this restricted entitlement could be distributed, combined with the problems of doing so in a manner which is equitable, is in MfE's view not warranted.
76. In addition, there is no guarantee that New Zealand will be able to carry over CP1 Kyoto units. Should we not be able to do so, then the extra units any participants may have purchased in anticipation of being able to do would be a direct loss, whether to the Crown or to the individual account holders. This would be a loss with no mitigating benefit.
77. In light of the options analysis, impact assessment, information received from submissions, and additional considerations, our assessment is that Option A, to not allow individual account holders to carry over CERs or ERUs, should be proceeded with.

## Consultation Issue 2 – carry-over of AAUs

78. Because the international rules do not place any restriction on the carry-over of AAUs, there is no need to devise a system whereby any carry-over is allocated fairly and equitably across the ETS.
79. The simplest way to allow this carry-over is for the NZEUR to automatically apply carry over any NZ AAUs on behalf of individual holders of these units. This is the only option assessed. A summary of the assessment of this proposed option against the evaluation criteria, and any associated regulatory impacts, is provided in Table 4 (below).
80. The consultation document called for other options that should be considered; none were put forward.
81. The number of NZ AAUs held by market participants is limited. The majority of NZ AAUs are held in Crown accounts. There are no social or cultural impacts of following the

proposed option of automatically carrying over those AAUs on behalf of individual account holders.

82. Of the 20 submissions received, 14 supported this option, with the remaining 6 offering no opinion.

83. As the proposed option is the most efficient and effective, does not raise any issues of inequity, received unanimous support from submissions, and places the least amount of administrative burden on both the Crown and individual account holders, it seems the clear and logical option for regulations to be made implementing this option.

84. Although the international Kyoto carry-over rules permit unlimited carry-over of AAUs for eligible Parties, there is a risk of cancellation of these units for Parties that have not inscribed a target under the Kyoto Protocol's second commitment period that will need to be managed. In order to provide market certainty, if AAUs cannot be carried over and are cancelled, the Government proposes to replace NZ-issued AAUs held in private accounts by allocating owners an equivalent number of NZUs. This is appropriate because these units were issued by the Government, and it is feasible because only a small number were issued.

85. The alternative options for this proposal are to:

- Not offer to replace cancelled NZ AAUs: The Government could not offer to replace NZ AAUs. However, this would create a disadvantage for those account holders with NZ AAUs who would face a fiscal loss through their cancelled units. NZ AAUs were allocated on the basis that they would be able to be used in the post-true-up period and not replacing these units would undermine the integrity and good faith in which they were allocated. We are not considering this option, as it is not equitable or efficient for account holders.
- Re-imbursing account holders for their loss of units: Under this option, the Government could pay over the amount that was foregone by account holders with cancelled units. This option is not considered as it would be costly to replace NZ AAUs, which have no clearly transparent market price.

86. Therefore, the Government considers the best option would be to replace NZ AAUs, if they are cancelled, with NZUs. This option is considered the most efficient, effective, and equitable and would also maintain the environmental integrity of the ETS by upholding the good faith of the Government who issued NZ AAUs.

## **IMPACT ASSESSMENT**

87. There may be financial implications associated with these proposals in the event that:

- International rules prohibit New Zealand from carrying over AAUs;
- The Crown replaces NZ AAUs with NZUs, and
- NZUs are trading at a higher price than AAUs when the NZ AAUs are replaced with NZUs.

88. My officials believe it is more likely that Parties to the Kyoto Protocol will be able to carry-over any surplus AAUs that they hold. However, as noted previously, certainty around this point will not be available for some time. This potential cost would be treated as a contingent liability and reported by the Ministry for the Environment on that basis.

89. If New Zealand is unable to carry over NZ AAUs and these units are cancelled, and assuming that all NZ AAUs currently held in private accounts (2 million) are replaced with NZUs, the contingent liability is estimated at \$6.72 million using current carbon prices. This would likely fall in the 2015/16 financial year. This liability arises as a result of the price differential between NZ AAUs (valued based on spot secondary CER prices of \$1.04) and NZUs (\$4.40) at 1 September 2013.<sup>2</sup>

#### Transaction costs

	NZ AAU	NZU	Volume of Units
Price of unit (as at 1/9/13)	NZ\$1.04	NZ\$4.40	2 million
Price Differential	NZ\$3.36		
Total cost			NZ\$6.72m

<sup>2</sup> Please note that we have used two different prices to value the NZU – one is an offer price and reflects the price that market participants face (\$4.50 from Westpac) and the other is a price used by the Government in valuing ETS revenues/expenses in the Financial Statements (\$4.40).

**REGULATORY IMPACT ANALYSIS**

**Table 3 Summary of options: CERs and ERUs**

(CRITERIA: A = Efficiency, B = Effectiveness, C= Transparency, D= Clarity, E= Equity, F= Environmental Integrity) Note that in the absence of a clear status quo, assessment of each option against the assessment criteria in this table has been compared against the alternative option.

Options	Criteria						Impacts	Net impact	
	A	B	C	D	E	F			
Objectives: To increase certainty for the eligibility of CP1 Kyoto units in the ETS; carry-over regulations must be written so they can be applied equitably, in a manner which is transparent and which maintains the environmental integrity of the ETS.									
<p><b>Option A: CERs and ERUs not able to be carried over</b></p> <p>Under this option, account holders would not be able to carry-over CP1 CERs or ERUs.</p>							<p>12 out of 19 submitters who voiced a preference on this issue were in favour of this option.</p> <p>ENVIRONMENTAL: There are no foreseeable environmental impacts from pursuing this option.</p> <p>ECONOMIC: This option could potentially cost those account holders who purchased units and were not able to surrender or sell them by May 31 2015. The maximum extent of this cost would be the volume of units affected, time the price differential of those units and the cost of NZUs to surrender in their stead. There could be an additional "Opportunity cost". The total of these two impacts across the whole of the ETS, this could be in the order of NZ\$58m, spread over the 7 years out to 2020. These funds would remain in New Zealand rather than offshore.</p> <p>SOCIAL: The reputation of the ETS could be perceived to be enhanced, owing to decision to not allow CP1 units for surrender in the ETS past 2015.</p>	<p><b>Improves</b>, provides market with certainty as early as possible, provides market participants with greatest amount of time to manage their positions, and minimises risk of financial loss accruing to account holders due to cancellation of units.</p>	
<p><b>Option B: CERs and ERUs able to be carried over</b></p> <p>Under this option, account holders would be able to apply to carry over CP1 CERs and/or ERUs.</p>	Queuing	X	X	X	X	X	✓	<p>7 out of 19 submitters who voiced a preference on this issue were in favour of this option. The main reasons put forward were:</p> <ul style="list-style-type: none"> <li>Option A would increase compliance costs</li> <li>Would abrogate their property rights</li> <li>Precluded them from future opportunities (eg cheaper units in the future )</li> </ul> <p>ENVIRONMENTAL: There could be a perception that this option has an impact on the environmental integrity of the ETS, owing to the fact that we would in effect be allowing participants the ability to surrender CP1 units to a point in time well beyond the commitment period for which they were issued. However, these units would still represent an actual emission reduction, and as such there is no significant environmental impact of allowing these units to be surrendered.</p> <p>ECONOMIC: This option could provide a small benefit to some account holders (those who were successful in their applications to carry over units). However, this limited benefit would come at a significant cost in terms of market uncertainty, affecting businesses' ability to make long-term decisions. It could also result in significant loss to those account holders who purchased CP1 CERs or ERUs on the premise that they would be able to be carried over, only to have their ability to carry these units over significantly scaled back.</p> <p>FISCAL: The fiscal implications of these options are nil. Under each option the Government receives the same amount of Kyoto-compliant emissions units, the difference is the type of unit. In the Crown accounts NZ ETS revenues and expenses are valued at the current CER price in the European ETS market. Therefore there is no price difference in the units.</p> <p>SOCIAL: The reputation of the NZ ETS could be impacted due to perceptions that CP1 units should not be surrendered for CP2 emissions obligations.</p>	<p><b>Worsens</b>, modest benefits for some, but not all account holders comes at cost of delayed certainty and inability to manage positions on a mid-to long-term basis. Also difficult to implement equitably.</p>
	Targeted	X	X	X	X	X	✓		
	Pro rata	X	X	✓	X	X	✓		
	Auctioning	✓	X	✓	X	✓	✓		

**Table 4 Summary of options: AAUs**

(CRITERIA: A = Efficiency, B = Effectiveness, C= Transparency, D= Clarity, E= Equity, F= Environmental Integrity). In the absence of a status quo or any viable options, the proposed option was evaluated against the objectives and the evaluation criteria.

Options	Criteria						Impacts	Net impact
	A	B	C	D	E	F		
Objectives: To increase certainty for the eligibility of CPI Kyoto units in the ETS; carry-over regulations must be written so they can be applied equitably, in a manner which is transparent and which maintains the environmental integrity of the ETS.								
<p><b>Option 1: Automatically apply to carry over AAUs on behalf of account holders</b></p> <p>Under this option, the NZEUR would automatically apply to carry-over all AAUs, to the extent it is able to do so, on behalf of individual account holders.</p>	✓	✓	✓	✓	✓	✓	<p>Of the 20 submissions received, 14 were in favour of this option, and 6 did not offer a preference. No other options were proposed.</p> <p>There are no fiscal, economic, social or cultural implications of this option.</p>	<p><b>Improves,</b> Most efficient way of managing this process. Eliminates risk of loss due to administrative oversight and reduces administrative burden on account holders.</p>
<p><b>Replace NZ AAUs with equivalent NZUs, if NZ AAUs cannot be carried over and are cancelled</b></p> <p>Under this option, the Government would replace all NZ AAUs held in private accounts with the equivalent NZUs, if New Zealand is not able to carry over AAUs and these units are cancelled following true up</p>	✓	✓	✓	✓	✓	✓	<p>This option was not included in the consultation document. However the risk that NZ AAUs may be cancelled is still uncertain. Replacing these units is appropriate to provide market certainty, and give participants security if they are unable to carry over their NZ AAUs, that the Government will honour these units in good faith.</p> <p>FISCAL: There are fiscal costs involved with replacing NZ AAUs for NZUs due to the price difference between these two units.</p> <p>There are no social or cultural implications of this option.</p>	<p><b>Improves,</b> Most efficient way of managing the risk of cancelled NZ AAUs. Provides market certainty and is equitable for participants who may be unable to use NZ AAUs.</p>

## Conclusions and recommendations

90. On balance, officials recommend that the following package of options best achieves the objectives stated above:

- To not allow individual account holders to carry over CERs or ERUs.
- To the extent that New Zealand is able to, automatically apply on behalf of holders of NZ AAUs for those units to be carried over.
- To allow for the replacement of units for any NZ AAUs which may be cancelled at true-up.

## Consultation on proposal for carry-over options in the ETS

91. Notification emails were sent to over 9,000 NZEUR account holders. In addition, specialised media (carbon market) were notified of and published details of the consultation. The consultation period was open from 4 to 29 March 2013.

92. In total 20 submissions were received in response to consultation on options for carry-over of CP1 Kyoto units in the ETS.

93. 7 submissions were received from the forestry sector (including carbon farmers), 8 from the energy and industrial sectors (including 2 from interest/ industry groups) and 1 from market intermediaries. 1 submission was received from iwi (with interests in forestry), 1 from local government, 1 from agriculture, and 1 from an individual.

### Consultation issue 1: CERs and ERUs

94. Of the 20 submissions received, 1 did not express a preference for either Option A or Option B. Of the remaining 19, 12 expressed a preference for Option A (63%), and 7 for Option B (36%).

Sector	Option A	Option B
Forestry (6)	6	0
Energy and Industrial (8)	2	6
Market intermediaries (1)	1	0
Iwi (1)	0	1
Local Government (1)	1	0
Agriculture (1)	1	0
Individuals (1)	1	0

95. The greatest level of support for Option B was from the Energy and Industrial sectors. Of those who supported Option B:

- 2 submissions were from interest or industry groups
- 3 stated that Option A would have no impact on them, or that they could manage the impact

- 2 stated that because they allowed their customers to provide them with units in lieu of paying an increased price, it would be difficult for them to manage Option A.

96. Reasons given for supporting Option A were:

- The carry over provisions have been known since the beginning of the ETS in New Zealand and any investment in CERs or ERUs was a conscious commercial decision by parties recognising their potential forward cancellation risk
- Option A provides the most assurance of equity and certainty for market participants, while also being an efficient and effective process for managing the carry-over
- It is not feasible to achieve the objectives of clarity, efficiency, and equity under Option B.
- Given the exact date and nature of the true-up remains uncertain, it is not possible to design a system that gives account holders sufficient notice to manage this
- Option A best aligns with the approach of international markets and our top 6 trading partners
- The inability to carry over these units will have the effect of increasing both the environmental and international integrity of the ETS
- Cash flows from carried-over units will remain offshore
- This would be a good signal for promoting more domestic action
- Allowing individual account holders to carry-over CERs or ERUs would result in those account holders receiving an unearned windfall gain
- The pricing differential between international units and NZUs in the ETS reflects, to an extent, that the permanence of NZUs versus the expiry date of international Kyoto units has been priced-in.

97. Reasons given for supporting Option B were:

- There is no reason why Option B cannot satisfy the evaluation criteria, in particular efficiency, effectiveness, and equity
- Status quo expectation was that carry-over would be fully devolved to participants
- Option A would result in significant financial loss
- Option A would limit the pool of units available to ETS participants, increasing cost of compliance
- Option A would present a concerning precedent that property rights can be removed without any form of redress
- Option A would remove participants' ability to capitalise on future opportunity to purchase least cost units
- Concerns about complexity and administrative costs of Option B are overstated
- Option A would be inconsistent with Government's messages about why access to low-cost international units was good for business, consumers, and the economy

- The fact that the majority of emitters have not committed to purchase of international units to meet surrender obligations beyond 2015 is not due to the absence of clear carry-over rules, but to general regulatory uncertainty in light of various changes to ETS settings, in particular concerning unit eligibility.

### *Other Options*

98. One submitter proposed another option, which was to allow an unlimited amount of CERs and ERUs to be carried over, but to then place a restriction on the amount of these a participant could surrender. This option is not feasible, as under the international rules we are not able to carry over an unlimited amount of CERs or ERUs.

### **Key concerns raised**

99. A number of submitters suggested that the proposals don't go far enough and that a quantitative restriction needs to be introduced to increase domestic incentives for abatement. Majority of these submitters were foresters. This is in line with previous submissions received on a number of other ETS consultations.

100. A number of submitters also suggested that the carry-over should not be aligned with the timing of the international carry-over period, but rather with the end of CP1. This would mean that they would be ineligible for surrender after the May 31 2013 surrender deadline.

101. The two principal grounds for objection to Option A include:

- Property rights/ legitimately held expectations:

The international carry-over rules have been in place since prior to the commencement of the ETS in New Zealand, and publicly available. Although public availability does not necessarily signify they were widely known, the Act clearly stated that any carry-over would be subject to regulations. A number of participants and market intermediaries have recognised this uncertainty, and feel that to allow carry-over to occur would unfairly advantage those companies who had not carried out proper due diligence in their compliance purchasing planning. Furthermore, it is commonly known that Kyoto units relate to specific commitment periods, and that these CP1 Kyoto units relate to the period 1 January 2008-31 December 2012. It would be unreasonable to have believed that by purchasing these units, account holders had somehow established a property right to surrender these units in perpetuity. Officials are of the opinion that by continuing to accept these units for surrender until May 31 2015, participants are able to avail themselves of the maximum ability to use these units that a reasonable person would have contemplated.

- Option A would impose significant costs:

Officials have contacted those submitters who stated that Option A would result in significant costs, and asked to provide any information that would enable them to better quantify the financial impact. These submitters indicated that any cost would be one of opportunity, rather than a cost due to unwinding of positions.

### *Consultation issue 2: AAUs*

102. 14 submitters responded to this issue. All were in support of the preferred option to automatically apply to carry-over AAUs on behalf of account holders.

103. No other options were suggested by submitters.

104. Other agencies were also consulted on this regulatory impact statement.

105. Following consultation, the risk that NZ AAUs may be cancelled has become more apparent. To mitigate this risk and to provide market participants with a greater degree of certainty, the Government has proposed to allocate equivalent NZUs to replace any New Zealand-issued AAUs, if they are unable to be carried over and are cancelled.
106. Replacing these units is appropriate to provide market certainty, and give participants security if they are unable to carry over their NZ AAUs. These units were issued by the Government on the basis that the Government will honour these units in good faith.

### Implementation

107. The Environmental Protection Agency (EPA) has confirmed that preferred package of options to manage the carry-over of Kyoto units in the ETS would be simple to administer and implement.