

On 24 September 2009 the Government introduced the Climate Change Response (Moderated Emissions Trading) Amendment Bill to Parliament, proposing a number of changes to the New Zealand Emissions Trading Scheme (NZ ETS).

This bulletin contains a summary of these changes and a series of questions and answers on key changes in the Bill and the intended operation of the amended NZ ETS.

Please note: The answer to the question "How much will the NZ ETS cost the average farmer?" has been amended since the original publication of this bulletin in September 2009.

Summary of the proposed changes to the NZ ETS

- The stationary energy, industrial processes (SEIP) and liquid fossil fuels (LFF) sectors will enter the NZ ETS on 1 July 2010. Monitoring and reporting requirements for these sectors will still commence on 1 January 2010.
- A transition phase will operate until December 2012. The transition phase will be implemented through:
 - a progressive obligation requiring SEIP and LFF participants to surrender only one unit for every two tonnes of CO₂-e emitted
 - a \$25 fixed price option whereby SEIP, LFF and forestry participants can satisfy surrender obligations by paying \$25 per unit.
- The export of New Zealand units (NZUs) will not be permitted during the transition phase. However, the prohibition on exports will not apply to forestry-related units. There will be no restrictions on banking of units during the transition phase.
- Free allocation to emissions-intensive, trade-exposed (EITE) industry will be provided on an intensity basis. The number of units allocated to emissions-intensive, trade-exposed industry will be reduced by 50 per cent during the transition phase when the progressive obligation is in place.
- The level of assistance will initially phase out at a rate of 1.3 per cent per annum beginning in 2013. The phase-out of allocation will also be considered through a five-yearly review of free allocation. The first review will be conducted in 2011. Any significant changes to the provision of free allocation will require a five-year notice period.
- The entry of agriculture into the NZ ETS will be delayed until 1 January 2015. Mandatory monitoring and reporting requirements for agriculture will still commence on 1 January 2012.
- Free allocation to the agricultural sector will be provided on an intensity basis on a similar basis to industry and will phase out at 1.3 per cent annum starting from 2016.
- An initial processor-level point of obligation will apply with flexibility to move to a farm-level point of obligation in the future.
- Free allocation to the fishing sector will be increased from the current level of 50 per cent of 2005 emissions for three years, to 90 per cent of 2005 emissions for two and a half years (July 2010 to December 2012). The level of free allocation will be specified as a number in legislation.
- Fishing allocation will be made to quota owners on the basis of tonnes of quota.
- A domestic '50 by 50' emissions reduction target for New Zealand will be set through regulation.
- Processing of applications for allocation to industry and agriculture will be removed from ministerial control. In the longer term, the Government's intention is to transfer administrative functions associated with the NZ ETS to an Environmental Protection Authority.



Transition phase

Q: How will surrender obligations for 1 July to 31 December 2010 be determined for the SEIP and LFF sectors?

A: SEIP and LFF participants will be required to collect data and report emissions for the period from 1 January to 31 December 2010, as provided under the Climate Change Response Act 2002. To determine surrender obligations, participants will also be required to report emissions for the period from 1 July to 31 December 2010 in the same emissions return.

Q: How will the \$25 fixed price option work?

A: The \$25 fixed price option will operate by allowing participants to satisfy part or all of their surrender obligations by paying \$25 per unit. Payment must be made by 31 May in a given year (the same date as the unit surrender deadline). Participants can fulfil obligations by surrendering freely allocated units, purchasing units on the market or by accessing the \$25 fixed price option.

Participants cannot bank or sell units purchased under the \$25 fixed price option. For administrative purposes, units will be issued, transferred to a participant's holding account and immediately surrendered.

Q: How will removal activities outside of forestry be affected by the transition phase?

A: During the transition phase participants (other than forestry participants) will be required to surrender only one unit for every two tonnes of CO₂-e emitted. A corresponding adjustment will be made to the number of units to which participants will be entitled to receive for removal activities other than forestry (ie, the entitlement will be reduced by 50 per cent).

Q: Will the fixed price option be adjusted over time?

A: The \$25 fixed price option only operates for 2.5 years from 1 July 2010 to 31 December 2012. It will not be adjusted over that time.

Q: Will there be any price controls after 31 December 2012?

A: The Government currently has no plans to introduce any price controls after this date. It is possible that this issue could be re-examined as part of the general review of the NZ ETS in 2011. If the NZ

ETS is linked with the Australian CPRS a price cap may be necessary.

Q: Won't the transition phase just lead to a sharp increase in carbon prices for firms at the end of the phase?

A: At the end of the transition phase firms will face the international carbon price. This could be higher than the \$12.50 that firms will effectively face through the fixed price option and the 2:1 progressive obligation. However, firms will be able to monitor carbon markets during this period and plan for any cost increase that might occur at the end of the transition phase.

Q: Why does the two for one progressive obligation not apply to the forestry sector?

A: Excluding the forestry sector from the progressive obligation is necessary to avoid fiscal and economic costs arising from deforestation being brought forward to take advantage of the transition phase. The \$25 fixed price option will have limited impact on the returns that foresters can earn from their carbon units, since they will be able to export them. On the other hand, foresters who face a liability from deforestation activities will have access to the \$25 price cap option.

Q: What rules will exist for the banking and exporting of units during the transition phase?

A: The export of units from the stationary energy, industrial processes, liquid fossil fuels and fishing sectors will not be permitted while the fixed price option is in place. This is to reduce arbitrage opportunities that may arise if participants are permitted to sell units purchased under the fixed price option in another market at a profit.

Forest owners will be allowed to export the units they receive under the forestry allocation plan (for pre-1990 owners) and from forest sequestration (for post-1989 owners). It is important that the NZ ETS provides a full economic incentive for new forest plantings which assists with reducing New Zealand's Kyoto liability.

All sectors will be permitted to bank units. This will allow firms in the SEIP, LFF and fishing sectors to sell units allocated to them in either the domestic or international markets at the end of the transition phase if they choose.

Government interventions in the market

Q: Will the Government participate in the domestic emissions trading market as purchaser of NZUs



during the transition phase or beyond?

A: No decisions have been made as to whether or not the Government will purchase NZUs at a guaranteed price or otherwise.

Q: Will the Government participate in the international or domestic emissions trading market to purchase assigned amount units or other Kyoto units?

A: No decisions have been made as to whether or not the Government will undertake trading activity to purchase Kyoto units. The Government has said that it will meet its Kyoto commitments and purchasing of units is an option available to it, should that be necessary. If the Government does purchase, a further decision will be necessary about the types of units the Government will purchase.

General forestry issues

Q: What changes have been made to the definition of deforestation?

A: The amendments clarify the conditions under which deforestation before 1 January 2008 is considered to have occurred, and under which there are no deforestation liabilities.

Q: What changes have been made to the definition of 'forest land'?

A: The definition of forest land has been broadened to better recognise land-use intent and management practice. The redefinition also provides more precise alignment with the definition of forest land under the Kyoto Protocol.

The practical test of whether an area is forest land now becomes, 'Is it likely the crown cover of forest species will exceed 30 per cent at some time in the future?' The impact of land management practices is implicitly included in determining whether an area is considered forest land. In cases where long-term land management practices imply that the land is regularly cleared before 30 per cent crown cover is achieved, this land is not considered forest land. However, as previously, once the crown cover of forest species exceeds 30 per cent on areas of at least one hectare, the area will be classified as forest land regardless of the intended land use.

Pre-1990 forestry issues

Q: Can pre-1990 forest owners meet their deforestation liability by planting an offset forest

in another location?

A: During the First Commitment Phase (CP1) of the Kyoto Protocol (between 2008 and 2012), forest owners will not have the option to offset their forest liabilities by planting an equivalent forest in another location. This is because allowing offsetting would impose significant fiscal risks on the Government.

The Act requires offsetting to be introduced domestically if international rules provide for it in future commitment periods. The Government is actively pursuing provisions for offsetting in any future international agreement.

Q: How many units will pre-1990 foresters receive from the forestry allocation?

A: Eighteen units per hectare will be allocated to Crown forest licence land. 39 units per hectare will be allocated to land that has changed ownership since 31 October 2002; and 60 units per hectare will be allocated to all other eligible forest land owners.

The 18 and 39 unit allocations have not changed. However, the Government proposes to fix the higher allocation at 60 units rather than to adjust this allocation on the basis of how many people apply for an allocation or an exemption. This will provide certainty to pre-1990 forest owners.

Q: When will these units be allocated?

A: The legislation specifies that these units will be transferred in two tranches: approximately 38 per cent of these units will be transferred in CP1 and the remainder transferred after 2012. These units will be transferred per hectare (rather than on an age class basis). However, if offsetting is permitted under the international rules in CP2, the Government may cancel some, or all, of the free allocation relating to this period.

Q: What changes have been made to the Tree Weed Exemption?

A: Changes have been made to the pre-1990 Tree Weed Exemption so clearing of wildings is not disincentivised. Those who have been undertaking tree weed eradication will now be able to apply for a retrospective exemption for any tree weed deforestation they have undertaken since 2008. In addition, those who receive an exemption will now have until the end of the relevant commitment period to complete deforestation activities. There will be periodic opportunities to apply for this exemption.



Post-1989 forestry issues

Q: What changes have been made to the post-1989 forestry provisions?

A: A participant will be able to redefine their Carbon Accounting Areas under certain circumstances. This is to allow participants to efficiently move from the look-up table approach to a measurement-based approach for forest carbon assessment.

A participant who is considering selling or transferring ownership of post-1989 forest land can now submit an emissions return prior to this transfer occurring. The participant will not surrender or earn emission units as a result of this emissions return but it will allow both parties to the transaction to have full information about the total net emissions and removals that have taken place on that land for the purpose of the ETS.

Agriculture

Q: What is the entry date and what are the reporting obligations for agriculture?

A: The entry date for the agricultural sector has been delayed by two years from 1 January 2013 to 1 January 2015. Participants may choose to voluntarily report their emissions from 1 January 2011, and must report their emissions from 1 January 2012.

Q: Where will the point of obligation be for the agricultural sector and why?

A: The point of obligation will initially be set at the processor level. The Government has the option to change the point of obligation to the farm level, subject to stakeholder views and the successful resolution of some practical issues, including the ability to verify emissions returns and to enforce compliance with the scheme.

Q: How will allocation to the agricultural sector work?

A: Only participants will be eligible to receive an allocation and the allocation will be provided on an output intensity basis. This means that a participant's allocation will vary with output. The assistance level will be 90 per cent of the emissions baseline and will phase out at -1.3 per cent per annum from 2016. The baseline will be the industry average emissions per unit of output. The allocation will be uncapped, meaning that there is no set limit on the number of units that may be allocated.

Q: Are there any eligibility tests or thresholds for agricultural allocation?

A: There are no eligibility tests or thresholds for agricultural allocation, meaning that all agriculture participants will be eligible for an allocation. This reflects the trade-exposed nature of New Zealand's agricultural industry.

Q: Will the NZ ETS be able to give farmers credit for use of mitigation technology like inhibitors?

A: It is more challenging to recognise individual farm-level mitigation activity under a processor level point of obligation. However, in principle, processors could reward efficient production or the use of particular mitigation technologies if they are able to verify these practices.

Q: How much will the NZ ETS cost the average farmer?

A: The cost of emissions for farmers will depend on a range of factors including the size of the farm, the farm type, and the intensity of operations. Initial analysis suggests that in 2015, at a carbon price of \$25/tonne CO₂-e, farmers will face the following costs on average:

- around 2.5 cents per kilogram of milk solids
- around 6 cents per kg of sheepmeat
- around 3 cents per kg of beef
- around 6 cents per kilogram of venison.

Nitrogen fertilisers are also likely to increase in cost by about \$14 per tonne of nitrogen.

The costs above are based on sector output and emissions projected to the year 2015. The analysis assumes a 2015 base year for the allocation baseline (ie, it is 90 per cent of projected 2015 emissions based on projected output in 2015).

Please note: allocative baselines and the base year on which they are set have not yet been determined. These will be specified in regulations and therefore subject to a separate process.

Also, the costs cover methane and nitrous oxide emissions only. They do not include pass-through costs from energy and fossil fuel use, or direct on-farm energy and fossil fuel use.

Q: Are agricultural processors likely to be eligible for an allocation for their energy use?

A: Allocation to the industrial sector is on an intensity



basis similar to agriculture. If a processor passes the eligibility test based on emissions intensity per unit of revenue, then they will receive an allocation. Highly emissions-intensive firms will receive 90 per cent and moderately emissions-intensive firms 60 per cent. As signalled in the Bill's first reading speech, it is possible that some areas of the NZ ETS will need fine-tuning and one specific area being considered relates to assistance to key food-processing areas such as dairy processing.

Fishing

Q: What are the changes to the fishing sector allocation?

A: There have been a number of changes to the fishing sector's allocation provisions.

- The fishing sector allocation has been increased from 50 per cent of 2005 emissions for three years to 90 per cent of 2005 emissions from fishing vessels for two and a half years (two and a half years is the period of time for which the transition phase will apply to the liquid fossil fuels sector).
- The fishing sector allocation provisions will now allocate NZUs to quota owners rather than registered fishing vessel operators. Quota owners are defined as people who owned quota on the date of introduction of the Climate Change Response (Moderated Emissions Trading) Amendment Bill.
- The Bill also contains a formula that sets out the basis on which allocation will be made to each eligible person (quota owner). Quota owners will receive free allocation in proportion to the amount of quota weight equivalent that they own.
- The Bill also specifies the actual amount of NZUs that will be allocated for free to the sector: 700,000 NZUs.
- The allocation plan process for the fishing sector has been significantly shortened. This is because the allocation plan process that applies under the existing legislation was designed for the more complex situations of the industrial and agricultural sectors. The specification of an amount of NZUs and a formula for allocation significantly reduces the complexity of the allocation process.

Q: Where did the number of 700,000 NZUs come

from?

A: In early 2009 the Ministry of Fisheries (the Ministry) contracted the research provider Roxburgh Plume Ltd to calculate the fuel consumption of the New Zealand fishing fleet in 2005.

The calculation showed that in 2005 the New Zealand fishing fleet is estimated to have consumed approximately 216 million litres of fuel. On the basis of the information provided by the survey, it was estimated that consumption of 216 million litres of fuel would generate approximately 620,000 tonnes of carbon dioxide equivalent.

This figure was determined by a methodology that used the following two converging methods.

- Direct method: A letter was sent to every vessel operator in the fishing industry seeking quantitative data on 2005 fuel consumption. The replies that were received represented nearly two-thirds of the industry's installed capacity when expressed in kilowatt-hours, and based on calculated estimates of total consumption. Nearly 70 per cent of the total consumption for 2005 is known from actual figures derived from this survey.
- Indirect method: The direct method was ground-truthed against information that is held by the Ministry (including information on engine size and voyage lengths for each vessel in the fishing fleet), and known international conversion factors.

These two approaches were drawn together by using the conversion factor to estimate consumption from kilowatt-hours where survey information was not available.

The number of NZUs to be allocated to the fishing sector, to be stated in legislation, was calculated as follows.

2005 emissions	620,000 tCO ₂ -e
90% of 2005 emissions	558,000 tCO ₂ -e
2.5 times 2005 emissions	1,400,000 tCO ₂ -e
50% reduction due to progressive obligation	700,000 tCO ₂ -e

The size of the allocation pool to be awarded to fishing vessel operators was therefore determined as



700,000 NZUs.

Other questions on the operation of the Modified NZ ETS

Q: Is the trading year to remain as the calendar year as per existing legislation?

A: Yes

Q: Is administrative borrowing permitted (ie, use of future years' allocation to meet current year surrender obligations)?

A: No, borrowing from future years will not be permitted in the NZ ETS.

Q: Which international units will be accepted for surrender in CP1?

A: There are no changes to the types of units that will be accepted into the NZ ETS (ie, CERs, ERUs and RMUs will be accepted). The legislation also retains the option for the Government to allow through regulations imported assigned amount units for surrender (assigned amount units issued out of the initial assigned amount of a Party other than New Zealand). No decision has been made about which units will be permitted.

Additionally, the Government is open to links with other schemes such as the European Emissions Trading Scheme or the Australian Carbon Pollution Reduction Scheme, but has not made decisions about whether or not to approve units from emissions trading schemes in other jurisdictions for surrender.

Q: Why have the Australian activity definitions and thresholds been used as the basis for New Zealand's allocation policy?

A: Extensive analysis has been undertaken in Australia to identify those sectors whose international competitiveness is at risk from the introduction of a carbon price and the eligibility thresholds to cover this risk (See *Australia's Low Pollution Future, The Economics of Climate Change Mitigation*, 2008). There is no reason why this analysis is not applicable to New Zealand's industrial sector.

Economic modelling of climate change policy options for New Zealand was completed in early 2009 by NZIER and Infometrics. Although this study did not specifically identify the industries whose competitiveness would be at risk, the amendments included in the Modified NZ ETS are in line with the broad recommendations in this report. In particular,

the report recommended:

"Competitiveness at risk issues need to be considered. Until there is clearer evidence about the actions of the rest of the world and the nature of technological improvements, our modelling shows that there is value in designing any pricing scheme with some flexibility to prevent significant leakage or damage to key industries. Free allocation linked to output can be a cost-reducing mechanism of dealing with high costs of abatement and a lack of action by other countries (leakage and competitiveness at risk issues)."

Q: Will emissions trading administration be managed by an Environmental Protection Authority (EPA)?

A: The Government is considering transferring emissions trading administrative functions to an Environmental Protection Authority (EPA) at some point in the future. Functions that might be appropriate to transfer to an EPA include those relating to the assessment and processing of individual applications for allocation, the New Zealand Emission Unit Register, and other administrative type functions. Decisions are yet to be taken on what and when any functions may transfer.

Impacts of the Modified NZ ETS

Q: What impacts will the Modified NZ ETS have on small and medium businesses?

A: The changes will substantially lessen the impacts of the NZ ETS on small to medium businesses until the end of 2012. Businesses without obligations under the NZ ETS will benefit from a smaller increase in fuel and electricity prices of approximately half of that under the previous scheme.

Free allocation of units will be provided to those industries that are emissions-intensive and trade-exposed on an intensity basis. More emissions-intensive industries will receive a higher level of assistance than less emissions-intensive ones. This approach will provide more assistance to highly emissions-intensive, trade-exposed firms than the previous approach. However, some firms that would have previously received assistance will fall below the emissions-intensity thresholds and be ineligible to receive assistance. These firms will still benefit from the transition phase in the first two and a half years of the scheme.

Q: What impacts will the Modified NZ ETS have on



households?

A: Electricity prices are expected to increase by about 5 per cent (1c/kWh) during the transition phase. Petrol and diesel prices are expected to increase in by 7c/L about 3.5c/L during the transition phase. The costs for the average household are expected reduce from \$330 per year to \$165 per year during the transition phase.

Where to go for more information

To view a copy of the Minister for Climate Change Issues' speech introducing the Bill to Parliament, visit <http://www.beehive.govt.nz/minister/nick+smith>

To view a copy of the Bill, visit <http://www.legislation.govt.nz>

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