



The New Zealand Emissions Trading Scheme

ETS 2012 – Facts and figures

About this factsheet

The New Zealand Emissions Trading Scheme (ETS) was introduced as the least-cost way to reduce our greenhouse gas emissions. This factsheet presents information regarding allocations, removals, emissions and the surrender of units. Six sectors have obligations to surrender units according to the level of their emissions: Forestry, Energy, Industrial Processes, Liquid Fossil Fuels, Synthetic Greenhouse Gases, and Waste. The Synthetic Greenhouse Gases and Waste sectors' obligations to surrender units began on 1 January 2013, therefore they will not have units surrendered in this factsheet. The Agriculture sector currently has reporting obligations but no corresponding surrender obligations.

The *Report on the New Zealand Emissions Trading Scheme* published in 2011 contained key facts and figures relating to the first surrender period (1 July to 31 December 2010). The NZ ETS 2011 – *Facts and Figures* published last year contained information relating to the second surrender

period of the ETS (1 January to 31 December 2011). This factsheet provides updated figures and comparisons for the third surrender period of the ETS (1 January to 31 December 2012).

How to use this factsheet

This factsheet provides the key facts and figures relating to the ETS for the period 1 January to 31 December 2012. It provides an overview of the operation of the ETS in a simple but informative manner. For further background information on the ETS, please see the Climate Change website (www.climatechange.govt.nz).

Much of the information contained in this factsheet was drawn from the Environmental Protection Authority's (EPA) *Section 89 Report*, which is also available at www.climatechange.govt.nz. The EPA's *Section 89 Report* relates to the 2012 financial year (1 July 2012 to 30 June 2013) which is different to the period covered by this factsheet (1 January to 31 December 2012).



Units surrendered

Participants in the ETS are able to surrender either New Zealand Units (NZUs) or international units. The ETS operates within a broader global emissions market. The ETS is linked to this international market by allowing participants to purchase approved international units. In addition, foresters are able to sell their units offshore.

Figure 1 shows the breakdown of the types of units that have been surrendered during the third surrender period. This surrender period relates to emissions that occurred between 1 January and 31 December 2012. Forestry is a different matter, as emissions may be reported at a different time to when they occurred. This factsheet takes account of forestry emissions figures reported in 2012, which may have occurred between 2008 and 2012.

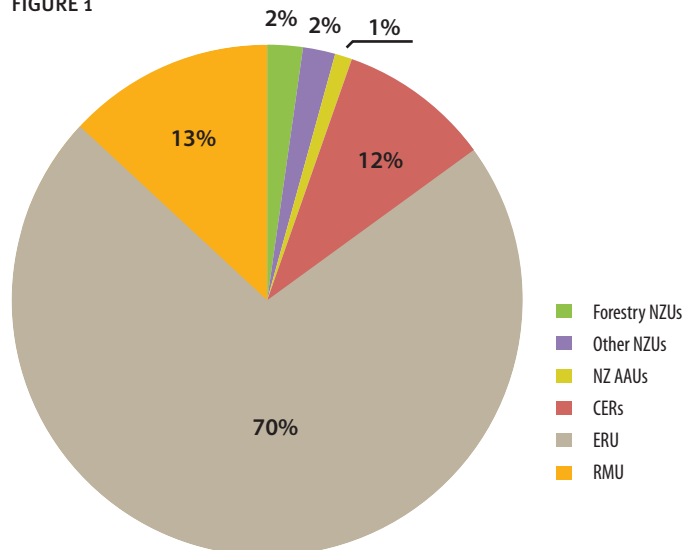
2012 saw a significant increase in the number of international units surrendered, in particular Emission Reduction Units (ERUs). Table 1 (page 3) provides a brief description of the various types of units and how many were surrendered.

* The 2010 surrender period relates to emissions over a six-month period for non-forestry sectors, whereas the 2011 and 2012 surrender periods relate to emissions over a full year. Also the 2012 figure differs to that in the EPA's [Section 89 Report](#). Primarily this is due to post-1989 foresters surrendering units in 2013 for activities that did not occur in 2012, the period for which this factsheet relates. The EPA's [Section 89 Report](#) covers activities in the 2012-13 financial year (1 July 2012 to 30 June 2013).

Furthermore, the total units surrendered for 2010 and 2011 have changed from the previous factsheet due to the late surrender of units or amendments to emissions returns.

Types of units surrendered

FIGURE 1



Total units surrendered:*

2010: 8,338,302

2011: 16,363,219

2012: 26,930,795



Table 1: Options currently available to participants of the ETS to meet their surrender obligations

<p>Forestry NZUs (New Zealand Units)</p> <p>2010: 5,319,159 2011: 2,105,049 2012: 597,644</p>	<p>NZUs given to foresters in the ETS. They may be converted to NZ AAUs for offshore sale.</p>
<p>Other NZUs*</p> <p>2010: 2,558,275 2011: 2,311,737 2012: 440,946</p>	<p>All other NZUs, including those given to Industrial Allocation recipients. They cannot be converted to NZ AAUs.</p>
<p>NZ AAUs (Assigned Amount Units)</p> <p>2010: 262,883 2011: 279,511 2012: 166,854</p>	<p>New Zealand based AAUs. Can be either:</p> <ul style="list-style-type: none"> › Forestry NZUs that have been converted into NZ AAUs; <i>or</i> › NZ AAUs that have been granted to companies in New Zealand that have participated in the Projects to Reduce Emissions (PRE) or the Permanent Forest Sinks Initiative (PFSI).
<p>CERs (Certified Emission Reduction Units)</p> <p>2010: 133,150 2011: 4,150,189 2012: 3,311,235</p>	<p>CERs are units generated by Clean Development Mechanism (CDM) projects offshore. These units are able to be purchased by participants in the ETS and used to meet their surrender obligations.</p>
<p>ERUs (Emission Reduction Units)</p> <p>2010: 0 2011: 4,267,077 2012: 18,893,924</p>	<p>ERUs are units generated by Joint Implementation (JI) projects offshore. These units are able to be purchased by participants in the ETS and used to meet their surrender obligations.</p>
<p>RMUs (Removal Units)</p> <p>2010: 0 2011: 3,176,081 2012: 3,520,192</p>	<p>RMUs are Kyoto Protocol units generated through storing carbon in trees. These units are able to be purchased by participants in the ETS and used to meet their surrender obligations.</p>
<p>NZ\$25 Fixed Price Option</p> <p>2010: 64,835 2011: 73,575 2012: 0</p>	<p>Companies have the option to pay the Government a NZ \$25 fixed price per unit to be surrendered, rather than surrender the other types of eligible units.</p>

* In 2012 2,134 Other NZUs were surrendered late for emissions that occurred in the 2010 period and 18,774 Other NZUs were surrendered late for emissions that occurred in the 2011 period.

Industrial Allocations

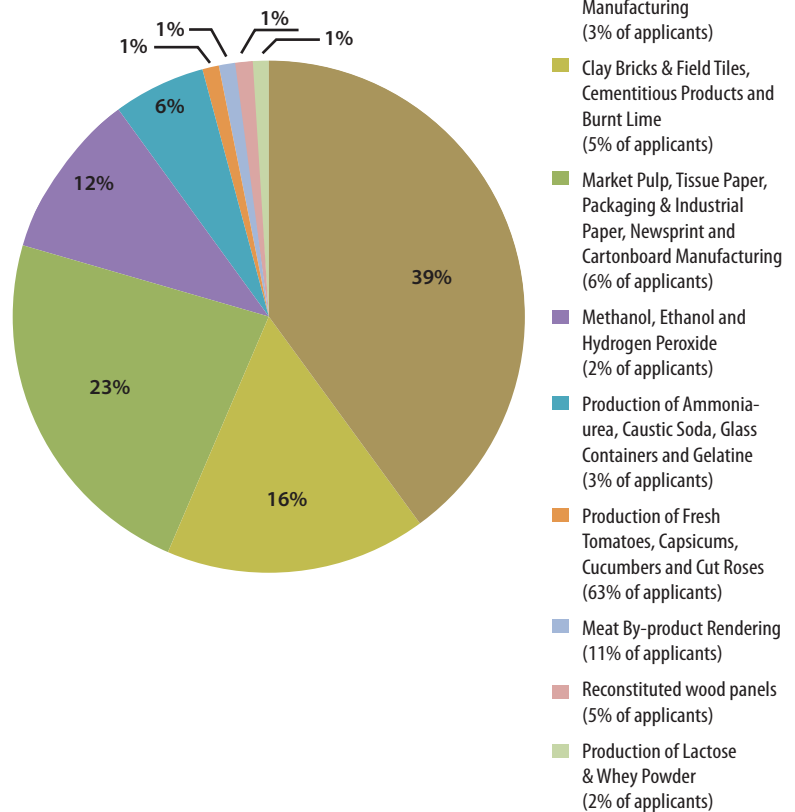
Twenty-six activities are currently eligible to receive industrial allocations. Companies carrying out these activities are given NZUs by the Government to help them adjust to the ETS because they are in emissions intensive and trade exposed industries. The full list of eligible activities is available on the [Climate Change website](#).

NZUs are allocated annually and can be applied for in advance at the beginning of the calendar year or in arrears after the year is completed.

Figure 2 shows the proportion of overall allocations received in relation to 2012 production by activity. This is broadly similar to last year's (2011) allocations. The total number of units allocated to industrial participants for 2012 was 3.45 million.

Percentage of NZUs allocated by activity

FIGURE 2



New Zealand's international climate target

New Zealand has announced an unconditional target of -5 per cent (below 1990 levels) by 2020. This is equivalent to a 2013 to 2020 QELRO of 96.8 on 1990 emissions.

This target is taken under the United Nations Framework Convention (the Kyoto Protocol's parent body) rather than under the Kyoto Protocol's second commitment period.

New Zealand will apply the Kyoto Protocol framework of rules to its target to ensure that our actions are transparent and have integrity.

New Zealand's conditional Copenhagen target range of reducing emissions between 10 and 20 per cent by 2020 remains on the table, pending the meeting of those conditions.

Forestry

Pre-1990 forestry

Pre-1990 forest is land that was covered in forest on 31 December 1989 and remained covered by predominantly exotic forest on 31 December 2007.

The value of some pre-1990 forest land decreased because under the ETS landowners now have to pay carbon charges if they want to convert their land to other uses. The Government has provided pre-1990 forest landowners with an allocation of NZUs to compensate them for this loss of land value.

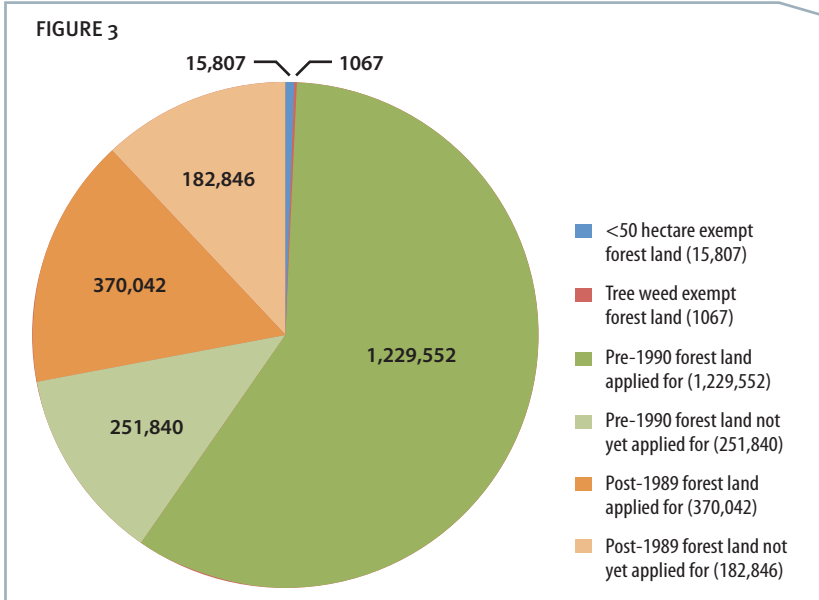
Post-1989 forestry

Post-1989 forest land is exotic or native forest established after 31 December 1989 on land that was not previously forested. These forests are eligible to earn NZUs for carbon absorbed from 1 January 2008.

Post-1989 foresters can choose to become voluntary participants in the ETS. They earn NZUs for the carbon their forests absorb, however these NZUs must be surrendered when the trees are harvested or if the land is deregistered from the ETS. Post-1989 forest had to be registered in the ETS prior to 31 December 2012 to claim the carbon stored between 2008 and 2012.

Figure 3 shows the distribution of forest land under the ETS. 2012 saw a further increase in the amount of forested land in the ETS.

→ Distribution of forest land (in hectares) under the ETS



Note: Total forest land area is based on the forest definition used for reporting to the United Nations Framework Convention on Climate Change (excluding pre-1990 natural forest). Under this definition some of the area reported as “not yet applied for” would not be eligible for the ETS.

The figure for pre-1990 forest land not yet applied for assumes the upper estimate of 1.5 million hectares of eligible forest. This figure includes Crown land, which will not be registered as pre-1990 forest in the ETS.

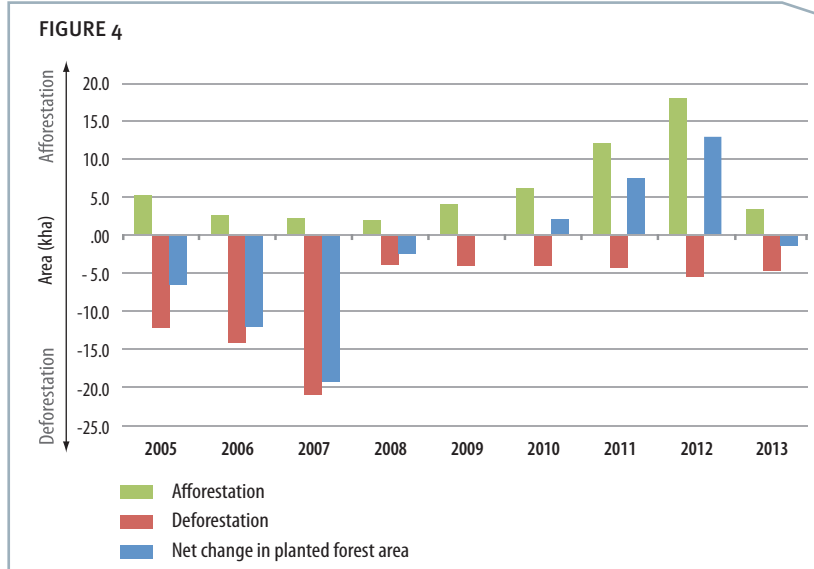


Figure 4 shows the net change in planted forest area for the period 2005-2013. As foresters have four years to replant before the area is considered deforested, some of the figures have changed with respect to the corresponding figures from last year's factsheet.

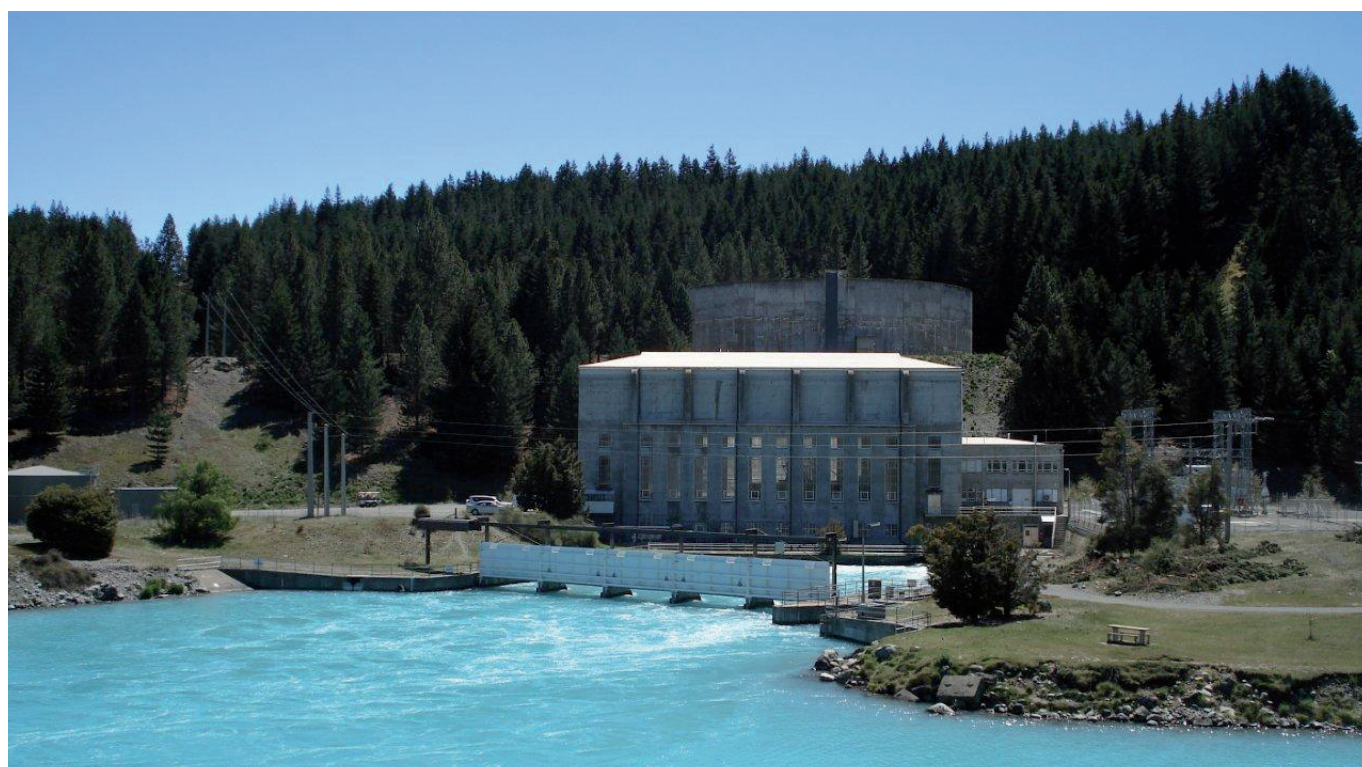
Note: The 2005-2007 figures are provisional and the 2008-2013 are projected. This is different to last year's factsheet due to the correction of the 2008 land use map in the process of producing the 2012 land use map. This means areas of afforestation and deforestation prior to 2008 are being revised. The deforestation reported for 2008 to 2013 is based on the provisional 2012 land use map as well as a deforestation intentions survey. Deforestation intentions project higher rates of deforestation than identified in the provisional 2012 land use map, however the intention to deforest is not the same as completed land use conversion. In the absence of evidence of land use change it can take up to four years following harvesting to confirm deforestation. This means that some areas of 2008 harvesting are only now being confirmed as deforestation based on 2013 observations.

The figures do not take account of natural deforestation.

→ Estimated annual net change in planted forest area in 2005 to 2013



Source: Based on analysis used for the midpoint scenario from the Ministry for the Environment. 2013. *Land Use, Land-use Change and Forestry Sector Greenhouse Gas Emission Projections for the First Commitment Period of the Kyoto Protocol from LULUCF Activities under Article 3.3: Results, Data and Methodology*. Wellington: Ministry for the Environment.



2010, 2011 and 2012 comparison

The ETS has now operated for three years and we are able to compare these years.* The charts on this page compare key figures between the three years.

The Energy and Industry and Liquid Fossil Fuels sectors are required to surrender one unit for every two tonnes of emissions produced. The Forestry sector is required to surrender one unit for every tonne of emissions produced. The Waste, Synthetic Greenhouse Gases (part of Energy and Industry) and Agriculture sectors have obligations to report their emissions for 2012 but no corresponding obligation to surrender units.

When participants deforest pre-1990 forest land they report the deforestation in an emissions return and then have one year to surrender the necessary units. This results in the emissions figure for the Forestry sector being higher than surrenders.

Industrial allocations represent the number of allocations given out for that year's activities. The 2010 figure relates to only six months, whereas the 2011 and 2012 relate to a whole year.

The one-off fishing quota allocations were completed in 2011 so there were none in 2012.

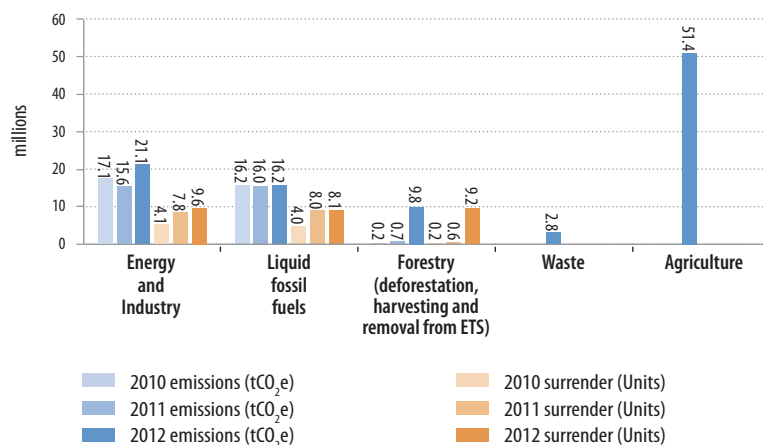
The figures for pre-1990 forestry relate only to the first tranche of allocations. The 2012 figures relate to the 2012 calendar year therefore do not include the second tranche of allocations, which were given out in the first half of 2013.

The figures for post-1989 forestry relate to removals reported at the conclusion of

The Ministry for the Environment would like to acknowledge the help of the Ministry for Primary Industries (MPI) and the Environmental Protection Authority (EPA) in compiling this factsheet.

→ 2010, 2011 and 2012 emissions and surrenders

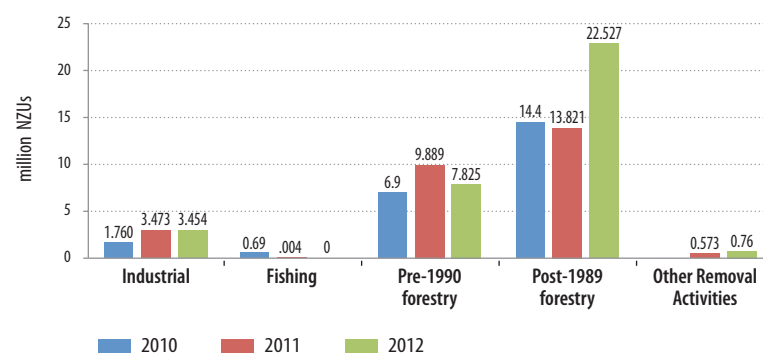
FIGURE 5



Note: The 2011 Forestry emissions have changed since the last factsheet to include emissions from post-1989 forestry activities.

→ 2010, 2011 and 2012 Units allocated and earned

FIGURE 6



the 2008 to 2012 mandatory reporting period. These removals could have occurred any time between 2008 and 2012.

Other removal activities refer to activities other than forestry that remove emissions from the atmosphere. This includes the export of Synthetic Greenhouse Gases and the production of products which embed carbon.

* In 2010 surrender obligations for non-forestry sectors relate only to the six month period 1 July 2010 to 31 December 2010 but participants reported on the full year (1 January to 31 December 2010). In 2011 and 2012 the reporting period and the surrender period were both for the full year (1 January to 31 December).

