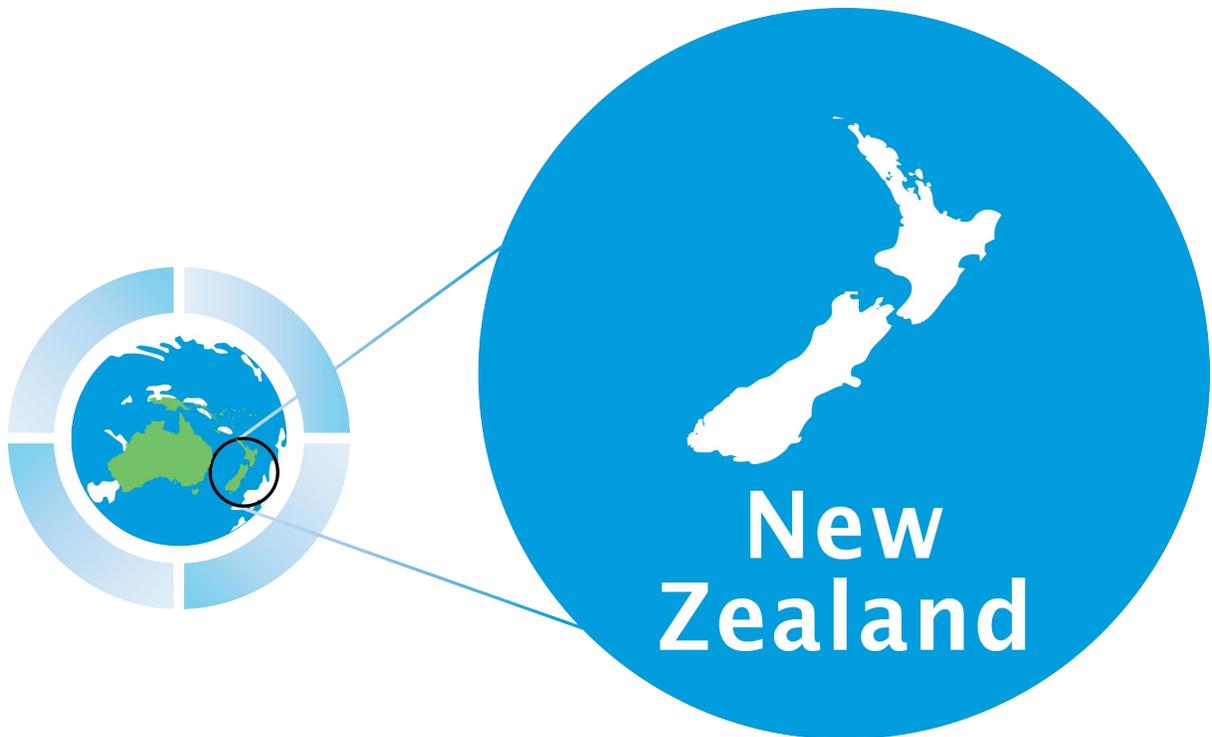




# NEW ZEALAND: AN EMISSIONS TRADING CASE STUDY



# New Zealand

## The World's Carbon Markets: A Case Study Guide to Emissions Trading

Last Updated: May 2015

New Zealand Overview 2015	
Target	-5% below 1990's levels by 2020
	-50% below 1990's levels by 2050
Cap	No cap
Carbon price	NZ\$ 5.95 (May 2015)
Greenhouse Gasses covered	Carbon Dioxide (CO <sub>2</sub> ), Methane (CH <sub>4</sub> ), Nitrous Oxide (N <sub>2</sub> O) Sulphur Hexafluoride (SF <sub>6</sub> ) Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), Nitrogen Trifluoride and other fluorinated GHGs
Number of Entities Covered	2590 (2014)
Sectors Covered	Electricity production, forestry, industrial processes, production and importation of liquid fossil fuels, synthetic GHGs and waste
Threshold	Dependent on sector
% total emissions covered	55%
Compliance tools & flexibility mechanisms	Free allowances, auctioning (since 2012), offsets, banking, limited borrowing "2 for 1" compliance

**Table 1: Program Overview**

## Brief History and Recent Developments

Year	Description of Event
2002	Climate Change Response Act released
2007	The Government announced a new set of climate policies with New Zealand's Emissions Trading Scheme (NZ ETS) as a cornerstone
2008	The NZ ETS came into force
2009	The Government announced a conditional GHG emissions reduction of 10-20 % below 1990 levels by 2020
2009	Amendments to the legislation smoothed the legal obligation for non-free allocated sectors
2011	The Government announced a long-term GHG emission target of -50% by 2050 below 1990's levels
2012	New Zealand ETS legislation was amended after the legal review of the scheme
2013	New Zealand ETS amendments came into force
2013	The Government announced an unconditional 2020 GHG emission reduction target of -5% below 1990 levels
2015	New Zealand covered operators no longer eligible to use international credits for compliance (From June)

**Table 2: Key Dates**

In 2013, New Zealand emitted just under 81 million tonnes of carbon dioxide equivalent (tCO<sub>2e</sub>), not including Land-Use, Land Use Change and Forestry (LULUCF).<sup>1</sup> In the same year, the LULUCF sector sequestered 26.76 million tCO<sub>2e</sub>.<sup>2</sup> New Zealand has a greenhouse gas (GHG) emissions profile that is unique among other developed nations—almost half of the country's emissions (not including those from LULUCF) are generated from the agricultural sector.<sup>3</sup> In 2013 (with revised global warming potentials), GHG emissions from methane (CH<sub>4</sub>) accounted for 44.0% of New Zealand's total emissions, while carbon dioxide (CO<sub>2</sub>) constituted 42.75% and nitrous oxide (N<sub>2</sub>O) 11.18%.<sup>4</sup>

The *Climate Change Response Act*<sup>5</sup> was enacted in November 2002 to establish a legal framework that would enable New Zealand to meet its obligations under the United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol.<sup>6</sup>

The government introduced the *Climate Change Response (Emissions Trading) Amendment Act 2008*.<sup>7</sup> The cornerstone of this Act was the New Zealand Emissions Trading Scheme (NZ ETS) in December 2007.<sup>8</sup> At first the system covered only the forestry sector, but expanded to include other sectors between 2008 and 2013.

The *Climate Change Response (Moderated Emission Trading) Amendment Act 2009*<sup>9</sup> was passed in November, which eased the burden of the ETS on some sectors. It introduced measures such as “2 for 1” compliance, whereby emitters could surrender emissions units covering just 50% of their emissions (so each 1 tCO<sub>2e</sub> unit covers 2 tCO<sub>2e</sub> of emissions) and a fixed price of NZ\$25 for two tCO<sub>2e</sub>. These measures were initially designed to expire at the end of 2012, but have been extended. Further revisions are expected in 2016.

A statutory review of the NZ ETS completed in June 2011 resulted in the *Climate Change Response (Emissions Trading and Other Matters) Amendment Act 2012* (Amendment Act 2012) which came into force in September 2013. The act:<sup>10</sup>

- deferred the start date for the surrender obligation for biological emissions from agriculture to an undetermined date,
- extended the 2009 transitional measures beyond 2012,
- offered more flexibility for forest landowners by continuing to freely allocate 100% of allowances and introducing offsetting for pre-1990 forests, and,
- gave the government the ability to hold auctions.

Since New Zealand opted out of the second commitment period of the Kyoto Protocol, in December 2013 the government announced that NZ ETS participants would no longer be able to use Kyoto Protocol units, such as emission reduction units (ERUs), for compliance from June 2015.

New Zealand's GHG emission reduction targets can be summarised as follows:

- **Kyoto Protocol first commitment period** (2008-12), New Zealand committed to reduce its annual average GHG emissions to 1990 levels (61.9 million tCO<sub>2e</sub>/year excluding emissions from LULUCF.<sup>11</sup>
- **Conditional emissions target range of 10 - 20 % below 1990 levels by 2020**,<sup>12</sup> announced in August 2009. The adoption of this target is conditional upon the approval of a mandatory and comprehensive climate change agreement at the international level. In August 2013, the Government adopted **an unconditional 2020 target** of 5% below 1990 levels.<sup>13</sup>
- **A long term GHG emission target** of 50% below 1990's levels by 2050 announced in March 2011.

## Summary of Key Policy Features

**CAP:** The NZ ETS currently features no absolute cap. Prior to the Amendment Act 2012, the Government could allocate an unlimited number of New Zealand units (NZUs). However, an implicit cap existed. Under the Kyoto Protocol's first commitment period, the Government was obligated to hold an equal amount of Assigned Amount Units (AAU) or an eligible international unit (certified emission reductions or CERs, and Removal Units or RMUs), for every NZU it allocated. If the Government allocated more NZUs than the amount of AAUs and eligible international units held, they were obliged to purchase shortfall units.<sup>14</sup>

The Amendment Act 2012 introduced caps for NZUs sold at auction and through allocations.<sup>15</sup> Both caps are based on an agreed net emission target. Currently, there is no information on these cap design features.

**SCOPE & COVERAGE:** The New Zealand ETS included 2,490 participants as of 30 June 2014; 331 participants have mandatory compliance obligations and 2,159 voluntarily opted to participate.<sup>16</sup> The NZ ETS was designed to cover the six main Kyoto Protocol GHGs (CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, and SF<sub>6</sub>) and regulate nearly 100% of national GHG emissions once all sectors are included.<sup>17</sup> The 2012 Amendment Act included exemptions for synthetic GHGs (HFCs and PFCs) contained in imported motor vehicles and other goods, which will be covered by a levy instead.<sup>18</sup>

Emissions are categorised into seven sectors, each one having schedules and obligations to surrender their units. In November 2012, the inclusion of emissions from the agriculture sector was deferred indefinitely. According to the Ministry for the Environment, this delay is explained by the insufficient availability of technologies to reduce emissions in this sector.<sup>19</sup> Agricultural producers are still required to report their emissions.

The **phasing in** process enabled the ETS to begin retrospectively in 2008 with the forestry sector, to avoid creating the perverse incentives to harvest early.

Participation in the ETS is compulsory for certain activities that exceed activity-specific emissions thresholds (see Table 3). The NZ ETS **point of obligation** is aimed as far **upstream** as possible in the supply chain for goods and services so as to encompass the final emissions without necessarily setting the point of obligation at the actual point of emissions. Therefore the source of the emissions supply and the point of obligation differ across sectors.

Sector	Point of Obligation	Coverage Thresholds	Full Obligations
<b>Agriculture</b>	Nitrogen fertilizer suppliers and meat and dairy processors	Not covered	To be determined
<b>Forestry</b>	Landowners and forestry rights holders	Owner of pre-1990 forest landowning more than 50 hectares: when they deforest at least 2 hectares. <i>Exemption:</i> Indigenous forests and trees classified as weed such as wilding conifers	1 <sup>st</sup> January 2008
		<i>Voluntary</i> - Owner of post-1989 forest: when they choose to deregister (remove) an area of post-1989 forest from the ETS.	
<b>Fossil fuels and transport</b>	Fuel suppliers and importers	> 50,000 litres per year <i>Voluntary</i> - large fuel retailers if they use: <ul style="list-style-type: none"> <li>&gt;10 million litres per year of jet fuels or,</li> <li>&gt;35 million litres per year of obligation fuels combined</li> </ul>	1 <sup>st</sup> July 2010
<b>Industrial</b>	Producers of iron, steel, aluminium, clinker or burnt lime, glass, gold	All emissions are covered except for: - gold producers: >5,000 tonnes CO <sub>2</sub> e per/y	1 <sup>st</sup> July 2010
<b>Stationary energy</b>	Coal, natural gas suppliers and importers, geothermal suppliers, refineries	coal: >2,000 tonnes per year <i>Voluntary:</i> purchasing >250,000 tonnes of coal per/y from mine coal participants	1 <sup>st</sup> July 2010
		natural gas: >10,000 litres per year <i>Voluntary:</i> purchasing > 2 petajoules of natural gas per/y from mine natural gas participants	
		geothermal fluid: >4,000 tCO <sub>2</sub> e per/y	
		used/waste oil: >1,500 tonnes of used or waste oil per/y	
		refining petroleum where the refining involves the use of intermediate crude oil products	
<b>Synthetic greenhouse gases</b>	HFCs and PFCs manufacturers and importers, large users of SF <sub>6</sub>	All emissions, except entities who pay the levy for leviable motor vehicles or leviable goods	1 <sup>st</sup> January 2013
<b>Waste</b>	Landfill operators	Covers only CH <sub>4</sub> emissions and all landfills except: <ul style="list-style-type: none"> <li>Landfills disposal of &lt;1000 tonnes of waste a year and located at least 150km away from the nearest modern landfill by land</li> <li>Landfills disposal of &lt;500 tonnes of waste per year and are located at least 75km away from the nearest modern landfill by land</li> <li>Landfills located at least 25km away from the mainland for offshore islands</li> </ul>	1 <sup>st</sup> January 2013

**Table 3: NZ ETS point of obligation & GHG emission threshold for capped sectors**

Source: New Zealand Ministry for Environment, April 2013. Available at: [climatechange.govt.nz](http://climatechange.govt.nz)

The **forestry sector** played an important role in determining New Zealand's ability to meet their international emission reduction obligations and in limiting the country's liabilities under the first commitment period of the Kyoto Protocol.

Indeed, the distinction made between the regime of pre-1990 and post-1989 forests finds its roots in New Zealand's Kyoto Protocol obligation. New Zealand must account for any deforestation of pre-1990 forests (both indigenous and exotic), but not of post-1989 forests. Post-1989 land-rights holders have the option to voluntarily participate and earn units for sequestration in return for assuming liabilities for future reversals. On the other hand, people with rights to pre-1990 forests incur mandatory obligations for emissions if they deforest their land, which requires coverage with emissions permits.

The NZ Government is responsible for how emissions from post-1989 forest lands (that are neither part of the NZ ETS nor Permanent Forest Sink Initiative – see [complementary policies](#)) impact the country's carbon budget.<sup>20</sup>

**COMPLIANCE OBLIGATION:** With the exception of some transitional provisions for early entrants, compliance periods are each one year. Allocations for the subsequent year are informed by output and emissions data recorded in the previous year. A reconciliation mechanism, or '*true-up*', corrects for errors in allocation later in the present year once valid data from the previous year is available.

**ALLOWANCE DISTRIBUTION:** Allowances have been **freely allocated** to three sectors; industry, fishing (one off allocation in 2010) and forestry. There are two purposes for these freely allocated allowances:

- Compensation for the effect of the ETS on asset values in the fishing and forestry sectors, and
- Prevention of ETS-driven loss of competitiveness and carbon leakage in the industrial sectors. Allocation in the industrial sectors is intensity-based. Only those activities that meet the emissions-intensity and trade-exposure criteria are eligible for allocation.<sup>21</sup>

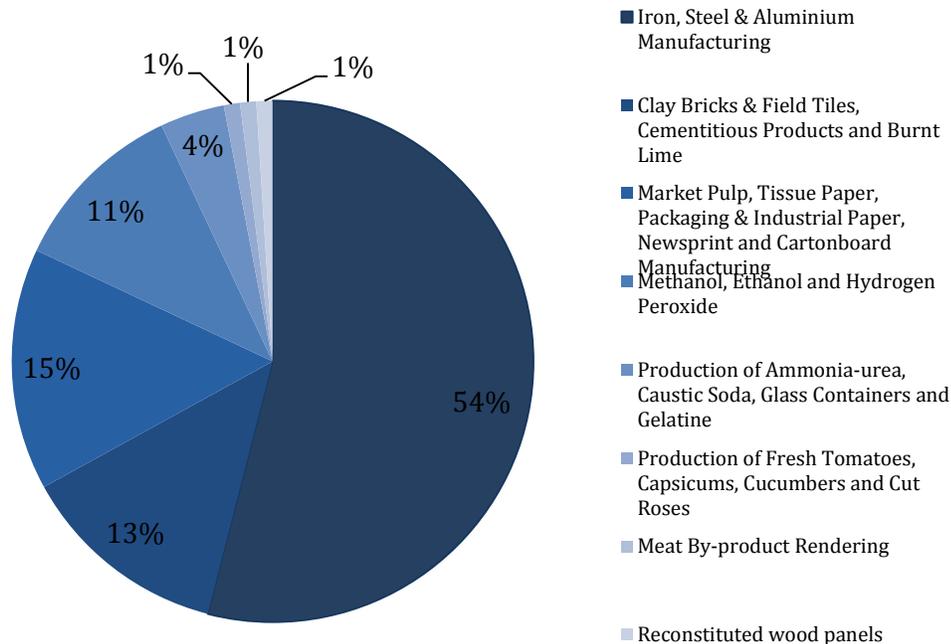
Regarding industrial sectors, free allocations were initially expected to decline by 1.3% per year starting in 2013; however, the 2012 amendments suspended the phase-out of industrial free allocation.<sup>22</sup>

Sector	Reason for Free Allocation	Types of NZUs Transfer	Free Allocation Provision		
<b>Forestry</b>	Asset Value Compensation	In two tranches	Before 31 December 2012	Owners of forest bought before 1 November 2002	23 NZUs per hectare
				Owners of forest bought on or after 1 November 2002	15 NZUs per hectare
				Crown Forest Licence (CFL) land as at 1 January 2008	7 NZUs per hectare
			After 31 December 2012	Owners of forest bought before 1 November 2002	37 NZUs per hectare
				Owners of forest bought on or after 1 November 2002	24 NZUs per hectare
				Crown Forest Licence (CFL) land as at 1 January 2008	11 NZUs per hectare
<b>Fishing</b>	Asset Value Compensation	One-off	Fishing quota owners (more than 800) received 700,000 NZUs. Units were allocated in proportion to the fishing quota.		
<b>Industrial</b>	Emissions-intensive and trade exposed (EITE) activities and Carbon leakage	Annually	Highly EITE	90% free allocation for activity $\geq 1,600$ tCO <sub>2e</sub> per NZD\$1 million of revenue	
			Moderately EITE	60% free allocation for activities $\geq 800$ tCO <sub>2e</sub> per NZD\$1 million of revenue).	

**Table 4: Free allowances allocations by sectors**

Source: The New Zealand Ministry of Environment, 2012. Available at: [climatechange.govt.nz](http://climatechange.govt.nz)

The total number of units allocated for 2013 was 4.80 million. This represents an increase of 39% compared to 2012, this is primarily due to changes to the allocative baselines as well as an increase in production by applicants.<sup>23</sup> Figure 1 shows the proportion of overall allocations received in relation to 2013 production by activity.



**Figure 1: Percentage of NZUs allocations by activity sectors**

Source: New Zealand Environmental Protection Authority, 2013. Available at: [epa.govt.nz](http://epa.govt.nz)

Stationary energy suppliers, landfills, liquid fossil fuel suppliers, and synthetic GHGs do not receive free allowances.<sup>24</sup> Free allocation was not provided to the upstream points of obligation in the stationary energy and liquid fossil fuels sectors because these producers were expected to pass on the costs.

**AUCTION OVERVIEW:** The use of auctioning was not initially included in the NZ ETS legislation; however, the 2012 amendments established the government's authority to sell extra NZUs, up to a pre-set cap.<sup>25</sup> There are two main reasons for adopting auctioning are:<sup>26</sup>

- To ensure that NZUs are available for participants instead of funding emissions reductions outside New Zealand via international units, and,
- To ensure that New Zealand meets its international and domestic emissions reduction targets.

Currently, the Government is assessing the design features of an auctioning system.<sup>27</sup>

**FLEXIBILITY PROVISIONS & COST CONTAINMENT MECHANISMS:** In order to provide greater flexibility to participants, the NZ ETS allows: the use of offsets, banking and borrowing, and transitional measures as described above. Additionally, the Government is open to linking its ETS others to reduce costs further.

#### Offsets

The NZ ETS allows the use of two types of offsets: domestic offsets (relating to the forestry sector) and international credits (until June 2015).

**Pre-1990 forestry offsetting:** The 2012 Amended legislation introduced an option for pre-1990 forestry owners to offset their deforestation liability by converting land to another use (i.e. that is not forestry), with a condition stipulating that owners must plant an equivalent new forest area that meets the following criteria:<sup>28</sup>

1. *Is direct planting on land that would be eligible as post-1989 land.*
2. *Is at least the same area, and,*
3. *Achieves the same carbon stocks as the deforested land.*

The 2012 Amendment Act prohibits new forests from being registered as post- 1989 forests, as a result, new forest owners are unable to opt-in under the NZ ETS. In the instance that pre-1990 forest land owners decide to offset their lands, they are required to surrender or repay NZUs equivalent to those freely allocated for the second tranche (after 31 December, 2012).<sup>29</sup>

**International credits:** Participants can meet their compliance obligations with eligible Kyoto-compliant units, until 1 June 2015. International credits include RMUs, ERUs, and CERs. Although there are no quantitative restrictions, there are some qualitative restrictions:

Ban on international credits	
<b>CERS &amp; ERUs</b>	<ul style="list-style-type: none"> <li>▪ generated from HFC23 and N<sub>2</sub>O industrial gas destruction projects</li> </ul> <p style="margin-left: 20px;"><i>exemption:</i> banned credits purchased before 17 December 2012 were eligible until 1 June 2013</p>
	<ul style="list-style-type: none"> <li>▪ generated from large-scale hydropower projects (&gt;20MW capacity) which do not comply with World Commission on Dams' guidelines</li> </ul> <p style="margin-left: 20px;"><i>exemption:</i> banned credits purchased before 17 December 2012 were eligible until 1 June 2014</p>

**Table 5: Banned international credits**

*Source: New Zealand Ministry of Environment, 2012. Available at: [climatechange.govt.nz](http://climatechange.govt.nz)*

In May 2014, the Government banned post-1989 forest landowners from the use of international credits after deregistering from the NZ ETS.<sup>30</sup> When deregistering, the forest owner is required to repay emission units equivalent to those initially issued.

New Zealand has not signed up to the second commitment period of the Kyoto Protocol, and therefore NZ ETS participants will not be able to use Kyoto Protocol first commitment period CERs, ERUs and RMUs to account for obligations after 31 May 2015. However, NZ AAUs will remain eligible and be automatically carried over after 1 June, 2015.<sup>31</sup>

#### *Other flexibility mechanisms*

**Banking:** there are no quantitative limits for banking allowances. During the first commitment period of the Kyoto Protocol, New Zealand was required to adhere to the Commitment Period Reserve (CPR) by maintaining 90% of its assigned amount in its registry.<sup>32</sup>

**Borrowing:** is allowed though only to the extent that it is possible to use units allocated for the following year that are issued prior to the surrender deadline, for the previous year allocations.

**Linking:** the domestic market is open to linking with international markets. Through the use of Kyoto credits in the NZ ETS, an indirect link has been established between New Zealand and the EU. According to Aldy and Stavins (2012), some elements of the NZ ETS, such as allowance allocation, were originally crafted to facilitate a direct two-way link with Australia. Due to the repeal of the Australian Carbon Pricing Mechanism in 2014, discussions have since ceased.<sup>33</sup>

**MARKET REGULATION & OVERSIGHT:** The Ministry for the Environment is responsible for “*leading the monitoring and development of emissions trading legislation and regulations*” amongst other roles.<sup>34</sup> The New Zealand Emission Unit Register (NZ EUR) is operated by the New Zealand Environmental Protection Authority (NZ EPA), which is also in charge of the monitoring, reporting, and verification system.<sup>35</sup>

### *Reporting & verification*

Participants are required to submit an annual emissions report to the NZ EPA by 31 March of the following year.<sup>36</sup> Verified annual self-reporting is required for covered sectors, and, for forestry, there is an option for voluntary quarterly reporting. Third-party verification is only required when participants do not wish to use the default emission factor to calculate their GHG emissions, and would rather apply for calculations to be made using a Unique Emission Factor.<sup>37</sup>

### *Enforcement*<sup>38</sup>

Installations that fail to meet their obligations must surrender units, and pay a penalty of NZD\$30 for each shortfall unit. Those who fall short of their obligations may incur:<sup>39</sup>

- A maximum NZD\$24,000 fine, for failing to: collect emissions data or other required information, calculate emissions and/or removals, keep records, register as a participant, submit an emissions return when required, or notify the administering agency or provide information when required to do so.
- A maximum NZD\$50,000 fine for: knowingly altering, falsifying or providing incomplete or misleading information about compliance obligations, including emissions return.
- A maximum NZD\$50,000 fine and/or imprisonment of up to five year for deliberately lying about obligations under the ETS to gain financial benefit or avoid financial loss.

As part of the Climate Change Response Act of 2002, the NZ ETS is subject to an independent review panel either every commitment period or every five years. The first such panel occurred in 2011 and released a final report on NZ ETS in June 2011.<sup>40</sup> The Panel was asked to consider the NZ ETS design features beyond 2012 and to advise on transitional measure and on the increase of the scope (to new sectors such as agriculture), some of the recommendations were taken into account.

**COMPLEMENTARY POLICIES:** The NZ ETS is considered to be the principal policy, alongside energy efficiency and renewable energy policies that are undertaken in various sectors, to reduce GHG emissions and address climate change impacts in NZ.<sup>41</sup>

### *Energy Efficiency & Renewables*

The New Zealand **energy efficiency and conservation strategy 2011-16** focuses on energy efficiency, energy conservation and renewable energy within six sectors: transport, business, homes, products, electricity system and the public sector.<sup>42</sup> The four main priority areas of the strategy are; to diversify resource development, improve environmental responsibility, secure affordable energy and improve efficiency. As part of its National Energy Strategy, New Zealand set a (non-binding) **renewable energy target** to supply 90% of electricity from renewable sources by 2025.<sup>43</sup>

### *Agriculture & Forestry*

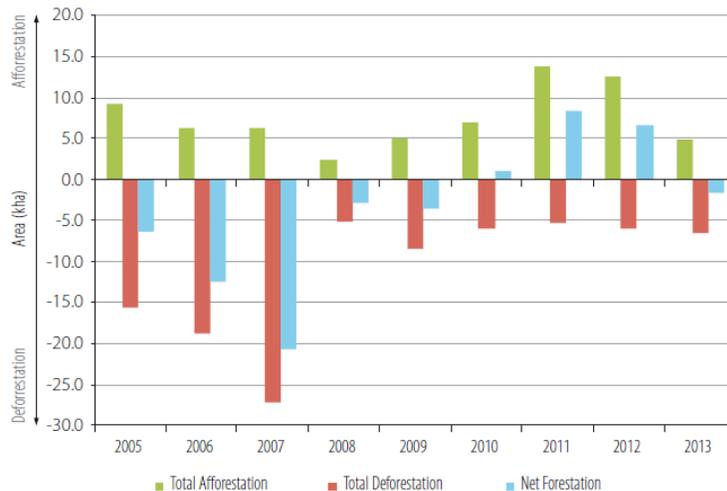
The *Primary Growth Partnership (PGP)* provides research on forestry and agriculture to inform policy making decisions in the sector. Among the PGP, the *Centre for Agricultural GHG Research* provides research on agriculture. Methodologies for reducing N<sub>2</sub>O emissions from agricultural pastures are limited as there are no practical methods to reduce CH<sub>4</sub> emissions from fermentation in ruminants.

In the **Forestry sector**, there are three main schemes that promote afforestation and provide incentives to maintain forests: the *East Coast Forestry Project*, the *Afforestation Grant Scheme* and the *Permanent Forest Sinks Initiative* (PFSI).<sup>44</sup>

The *Afforestation Grant Scheme* (AGS) was designed to increase Kyoto-compliant afforestation investments in New Zealand. The AGS is a competitive tendering system, under which the government offers cash grants to successful applicants for planting new forests (between 5-300 hectares) on previously un-forested land. Participants will own the new forests and earn an income from the future harvesting of timber while the Crown retains all carbon credits (and liabilities) from the carbon sequestered within the AGS forest for the first ten years after establishment. After ten years, ownership of the carbon credits revert to the land owner, at which point the forest may be registered under either the ETS or PFSI. The scheme has the additional objectives of reducing erosion, improving soil quality, water quality and biodiversity.

The *Permanent Forest Sink Initiative* (PFSI) enables landowners to receive Kyoto compliant AAUs for sequestration in return for a covenant on future land use. The design of the PFSI differs from the NZ ETS in terms of how it manages the risk of non-permanence. The PFSI requires the establishment of permanent forest with restrictions on harvesting for a period of ninety-nine years (even if limited harvesting is allowed). Conversely, the NZ ETS makes the forest owner liable for carbon losses. PFSI obligations are sealed in a Covenant between the Crown and the land owner and registered against the title of the land. Thus, the public authority has the right to enter the land to plant out the forest sink area if the forest sink is not maintained.

**RESULTS:** As seen in Figure 2 below, from 2008 to 2012, the NZ ETS contributed significantly to reducing deforestation.<sup>45</sup> In the year from 1 July 2013, 700 owners of post-1989 forests began to opt-out of the scheme. The area of registered post-1989 forest has, as a result reduced to 261,148 hectares (less than half of the total post-1989 forest estate of 550,000 hectares). Net deforestation is on the rise for the first time since the ETS was implemented. New plantings have fallen to pre-2009 levels, and patterns of harvesting without replanting are back to 2010 levels. The level of afforestation has not yet neutralized the deforestation that occurred prior to 2008 by forest owners seeking to avoid obligations. The overall environmental impacts of NZ forest provisions remain to be seen.<sup>46</sup>



**Figure 2: Annual net change in planted forest area in 2005 to 2013**

Source: New Zealand Environmental Protection Authority, 2013. Available at: [epa.govt.nz](http://epa.govt.nz)

For all sectors, the majority share of units surrendered since 2008 have been international credits (ERUs and CERs). In 2013, 99.5% of units surrendered for compliance were from overseas and primarily originated from former Soviet countries such as Ukraine and Russia.

### *Carbon Price Evolution*

Auctions have yet occurred in the NZ ETS despite the legislation now allowing for them. On the secondary market, up to January 2011, market prices for NZ Units were largely set by the international price for Certified Emission Reduction (CER) units. Indeed the small relative size of the NZ ETS, it is effectively a “price taker” on the market for international credits. International trading imposes a price ceiling on the NZ ETS, since New Zealand entities have no incentive to purchase domestic NZUs at a higher price than international credits.

Hence, following the CER price trend, by August 2012, the very low CER/ERU/RMU prices dragged the NZU price down to NZ\$4.55 per tCO<sub>2</sub>e. The NZU spot price declined by 72% over 2012, and reached NZ\$2.70 on 10 December 2012.<sup>47</sup> Since July 2013, the NZU spot price has increased to NZ\$4.75 due to the fact of the ban of using international carbon credits after 2015.



**Figure 3: Price development of the spot NZUs from May 2013 to May 2015**

Source: Common Trade Carbon, 2015. Available at: [commtrade.co.nz](http://commtrade.co.nz)

## What Distinguishes This Policy?

### UNIQUE ASPECTS

1. The NZ ETS is the only ETS to **include the forestry sector** from the start. The forestry sector functions as a net carbon sink, and allowance credits are generated by landowners who actively remove GHGs from the atmosphere in return for accepting liabilities for future reversals.
2. Currently, the **absolute amount of net emissions attributed to New Zealand is ensured by the government** and not by the NZ ETS as there is as tis no explicit cap. However, under under its commitment to the first Kyoto Protocol period, an implicit cap existed. The .The 2012 Amended Act, by allowing the government to held auctions, provided the power to set a cap on both allocated and auctioned allowances.<sup>48</sup>The government The government is at present working with other like-minded countries on scheme linking, and this might provide the impetus to develop a national emissions cap.

### CHALLENGES

1. Forestry emissions removals are essential for New Zealand to meet international obligations. Because the majority of carbon stored in trees is emitted to the atmosphere when trees are harvested, **forestry emissions are cyclical**.
2. The predominance of agricultural gases in the overall emissions profile. The 2012 Amended Act deferred the inclusion of biological emissions from the agriculture sector indefinitely, preferring to focus instead on the application of science to help address them. The Government had, in 2009, already established the Global Research Alliance on Agricultural Greenhouse Gases, now with 45 members from all regions of the world to assist in this work.<sup>49</sup>
3. New Zealand already generates the majority of its electricity generation from renewable sources (almost 80% in 2015).<sup>50</sup>Accordingly, further emission reduction abatements from this sector are limited.

## Author Acknowledgements

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**Disclaimer:** The authors encourage readers to please contact them with any corrections, additions, revisions, or any other comments, including any relevant citations. This will be invaluable in strengthening and updating the case studies and ensuring they are as correct and informative as possible.

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