

## **CLIMATE CHANGE RESPONSE ACT 2002**

## 2014 Emissions Trading Scheme Report

for the period 1 July 2014 to 30 June 2015, under section 89 of the Climate Change Response Act 2002



## Introduction

The Environmental Protection Authority (EPA) publishes the following information in accordance with section of the Climate Change Response Act 2002 (the Act).

#### All reported information:

- is current to 5 AM New Zealand Standard Time (NZST) 1 July 2015 and relates to activities that were reported during the 2014/15 financial year (1 July 2014 to 30 June 2015)
- represents actual unit transfers recorded in the New Zealand Emission Unit Register (NZEUR), and is based on current requirements of the Act.

#### Activities covered in this year's report are:

- Stationary Energy, Industrial Processes, Liquid Fossil Fuels, Waste, Synthetic Greenhouse Gases (within the Industrial Processes sector) and Agricultural activities
- Forest Land first established before 1990 being deforested
- Forest Land first established after 1989, and
- Recipients of forestry, industrial or fishing allocations.

The forestry sector has been in the New Zealand Emissions Trading Scheme (NZ ETS) since 2008. The Stationary Energy, Industrial Processes and Liquid Fossil Fuels sectors entered the NZ ETS in 2010. Waste, Synthetic Greenhouse Gases and Agricultural activities concluded their first full year of mandatory emissions reporting in 2012, with Waste and Synthetic Greenhouse Gas activities generating a surrender obligation from the 2013 reporting year.

This report excludes Negotiated Greenhouse Agreements (NGAs), Projects to Reduce Emissions (PRE) and the Permanent Forest Sink Initiative (PFSI).

The Environmental Protection Authority would like to acknowledge the help of the Ministry for the Environment and the Ministry for Primary Industries in compiling this report.

## **Table of Contents**

Introduction	2
Table 1: Schedule 3 mandatory activities	4
Table 2: Schedule 4 voluntary activities	6
Table 3: Activities reported	7
Table 4: Total emissions and removals	8
Table 5: Total emissions by activity	. 10
Table 6: Total removals by activity	. 12
Table 7: Compliance with obligations	. 13
Table 8: Total units surrendered	. 13
Table 9: Total New Zealand Units transferred for removal activities	. 14
Table 10: Total New Zealand Units allocated	. 15
Table 11: Payment of money to meet surrender obligations	. 15
Further Information	16

## Table 1: Schedule 3 mandatory activities

This table shows the total number of mandatory participants added to the Participant Register under section 56 or removed from the Participant Register under section 59 of the Act.

Released under section 89(1) (a)

Sector	Activity	Number of participants added	Number of participants removed	Total number of participants as at 30 June 2015
Part 1 Forestry	Deforesting pre-1990 forest land	104	114	88
Part 2 Liquid Fossil Fuels	Owning obligation fuel	0	0	5
Part 3	Importing coal	0	0	4
Stationary Energy	Mining coal	3	3	20
	Importing natural gas	0	0	2
	Mining natural gas	1	0	48
	Using geothermal fluid	0	0	12
	Combusting used or waste oil, tyres or waste	0	0	4
	Using crude oil	4	0	4
Part 4	Producing iron or steel	0	0	2
Industrial Processes	Producing aluminium	0	0	1
	Producing clinker or burnt lime	0	1	4
	Producing glass using soda ash	0	0	2
	Operating electrical switchgear that uses sulphur hexafluoride	1	0	6
	Importing hydrofluorocarbons or perfluorocarbons	2	0	13
	Importing or manufacturing synthetic fertilisers containing nitrogen	0	0	12
Part 5 Agriculture	Slaughtering ruminant animals, pigs, horses, or poultry	1	1	43
	Dairy processing of milk or colostrum	0	0	13

2014 New Zealand Emissions Trading Scheme Report

Sector	Activity	Number of participants added	Number of participants removed	Total number of participants as at 30 June 2015
	Exporting from New Zealand live cattle, sheep, or pigs	1	0	12
Part 6 Waste	Operating a disposal facility	0	0	34
Total participants added or removed (Schedule 3 Activities)		117	119	329

Table 1 does not include activities where there are no participants.

The registration for mandatory activities takes effect from the date the participant began the activity or when the activity entered the NZ ETS.

Mandatory participants are removed from the Register on receipt of a notification from the participant, or on the determination of the EPA that they no longer carry out the activity.

For up-to-date information on participants registered in the NZ ETS, visit the NZEUR website: www.eur.govt.nz.

## Table 2: Schedule 4 voluntary activities

This table shows the total number of voluntary participants added to the Participant Register under section 57 or removed from the Participant Register under sections 58(4) and 59 of the Act.

Released under section 89(1) (b)

Sector	Activity	Total number of participants added	Total number of participants removed	Total number of participants registered as at 30 June 2015
Part 1	Owning post-1989 forest land	170	120	2,062
Forestry Removal	Holder post-1989 forestry right	6	10	89
Activities	Holder post-1989 forestry lease	6	6	37
Part 2 Other removal	Producing a product with embedded substances	0	0	1
activities	Exporting hydrofluorocarbons or perfluorocarbons	2	0	7
Part 3 Liquid Fossil Fuels	Purchasing obligation jet fuel	1	0	5
Part 4 Stationary	Purchasing natural gas	0	0	3
Energy	Purchasing coal	0	0	3
Total participants added or removed (Schedule 4 Activities)		185	136	2,207

Table 2 does not include activities where there are no participants.

The registration for voluntary activities under Part 3 and 4 takes effect 12 months from the date the EPA notifies the participant that they have been entered on the Participant Register.

Schedule 4 participants are removed from the Register when they apply to withdraw their participation in the scheme or the EPA determines that they no longer carry out the activity. Deregistration for voluntary activities under Parts 3 and 4 takes effect 48 months from the date the participant has been confirmed as removed.

For up-to-date information on participants registered in the NZ ETS, visit the NZEUR website: www.eur.govt.nz.

## Table 3: Activities reported

This table shows the type of activities reported in emissions returns. There were 28 activities reported in emissions returns.

Released under section 89(1) (c)

Schedule	Sector	Activity
Schedule 3	Part 1 Forestry	Deforesting pre-1990 forest land
	Part 2 Liquid fossil fuels	Owning obligation fuel
	Part 3 Stationary energy	Importing coal
		Mining coal
		Importing natural gas
		Mining natural gas
		Using geothermal fluid
		Combusting used or waste oil, tyres or waste
		Using crude oil
_	Part 4 Industrial processes	Producing iron or steel
		Producing aluminium
		Producing clinker or burnt lime
		Producing glass using soda ash
		Importing hydrofluorocarbons or perfluorocarbons
		Operating electrical switchgear that uses sulphur hexafluoride
	Part 5 Agriculture	Importing or manufacturing synthetic fertilisers containing nitrogen
		Dairy processing of milk or colostrum
		Exporting from New Zealand live cattle, sheep, or pigs
		Slaughtering ruminant animals, pigs, horses, or poultry
	Part 6 Waste	Operating a disposal facility
Schedule 4	Part 1 Forestry removal activities	Owning post-1989 forest land
		Holder post-1989 forestry right

Schedule	Sector	Activity
		Holder post-1989 forestry lease
	Part 2 Other removal activities	Producing a product with embedded substances
		Exporting hydrofluorocarbons or perfluorocarbons
	Part 3 Liquid fossil fuels	Purchasing obligation fuel
	Part 4 Stationary energy	Purchasing natural gas
		Purchasing coal

Refer to Schedules 3 and 4 of the Act and related regulations for the full descriptions of the activities.

## Table 4: Total emissions and removals

This table shows the total quantity of emissions and removals reported in emissions returns submitted in the 2014/15 financial year.

Released under section 89(1) (d)

Total quantity of emissions reported in emissions returns	Total quantity of removals reported in emissions returns
82,954,325 tCO <sub>2</sub> e <sup>1</sup> emissions	14,314,496 tCO <sub>2</sub> e removed

A breakdown of the total emissions and removals and the associated reporting periods can be found in Tables 5, 6 and 6.1 of this document. Reported emissions and removals may change as a result of amendments to emissions returns.

This table shows emissions returns received between 1 July 2014 and 30 June 2015, and includes:

- Emissions reported for the 2014 calendar year for all activities in the NZ ETS
- Removals between 1 January 2008 and 31 December 2014 for the Forestry Removals sector, and
- Removals between 1 April 2014 and 31 March 2015 for Other Removal Activities.

¹ tCO₂e: Carbon dioxide equivalent (CO2-e) is a measure for describing how much global warming a given type and amount of greenhouse gas may cause, using the equivalent amount of CO2 as the reference. CO2-e is used to account for the different global warming potency of the different greenhouse gases, and allows them to be reported consistently. Gases are converted to CO2-e using the amount of warming they would cause in the 100 years following emission, compared to the effect of CO2 itself.

#### Table 4.1 Total amended quantity of emissions reported in previous years

Previous years' emissions may have changed due to amendments to emissions returns or the late submission of emissions returns. The table below details the emissions reported in previous annual ETS reports for each year and the amended figures.

Released under section 89(1) (d)

Year	Total quantity of emissions previously reported (tCO <sub>2</sub> e)	Total quantity of emissions after amendments and including forestry emissions (tCO <sub>2</sub> e)	Change in emissions reported (tCO <sub>2</sub> e)
2013	97,131,843.1	97,405,541.1	273,698.0
2012	88,288,617.6	87,838,242.7	-450,374.9
2011	32,312,492.0	32,555,734.2	243,242.0
2010	33,469,773.0	33,257,657.1	-212,115.9

The 2008 and 2009 annual ETS reports did not report total emissions for those financial years. Only the forestry sectors participated in the NZ ETS in 2008 and 2009.

#### Table 4.2 Total amended quantity of removals reported in previous years

Annual emission returns for forestry removal activities (post-89 forestry) are voluntary and therefore the previous year's removals may change as participants submit returns for removals covering multiple years. This table shows removals reported by the Forestry Removals sector and Other Removal Activities sector for the 2012 and 2013 calendar years and the amended figures.

Released under section 89(1) (d)

Year	Total quantity of removals previously reported (tCO <sub>2</sub> e)	Total quantity of removals after amendments to emissions returns (tCO <sub>2</sub> e)	Change in removals reported (tCO <sub>2</sub> e)
2013	19,470,860	19,531,777	60,918
2012	24,163,829	24,189,218	25,389

The figures relate to actual removals for each period reported. There were no changes to removals reported for the years 2008–2011.

## Table 5: Total emissions by activity

This table shows the total quantity of emissions reported in emissions returns by activity.

Released under section 89(1) (e)

Schedule	Sector	Activity	Emissions reported to the EPA from 1 July 2014 to 30 June 2015 (tCO₂e)
Schedule 3	Part 1 Forestry	Deforesting pre-1990 forest land	6,692,527
	Part 2 Liquid fossil fuels	Owning obligation fuel	16,072,953
	Part 3 Stationary	Importing coal	854,219
	energy	Mining coal	1,565,846
		Importing natural gas	5,508
		Mining natural gas	10,092,004
		Using geothermal fluid	849,945
		Combusting used or waste oil, tyres or waste	45,384
		Using crude oil	14,301
	Part 4 Industrial processes	Producing iron or steel	59,546
		Producing aluminium	610,815
		Producing clinker or burnt lime	774,629
		Producing glass	15,702
		Importing hydrofluorocarbons or perfluorocarbons	1,685,087
		Operating electrical switchgear that uses sulphur hexafluoride	5,142
	Part 5 Agriculture	Importing or manufacturing synthetic fertilisers containing nitrogen	2,347,271
		Dairy processing of milk or colostrum	16,009,529
		Exporting from New Zealand live cattle, sheep, or pigs	158,125

Schedule	Sector	Activity	Emissions reported to the EPA from 1 July 2014 to 30 June 2015 (tCO <sub>2</sub> e)
		Slaughtering ruminant animals, pigs, horses, or poultry	14,601,103
	Part 6 Waste	Operating a disposal facility	1,358,228
Sub-total so	chedule 3 emis	sions	73,814,864
Schedule 4	Part 1 Forestry removal activities	Harvesting post-1989 land or removing post- 1989 land from the Emissions Trading Scheme	3,803,565
	Part 3 Liquid fossil fuels	Purchasing obligation jet fuel	669,179
	Part 4 Stationary	Purchasing natural gas	1,493,725
	energy	Purchasing coal	3,172,992
	Sub-total so	chedule 4 emissions	9,139,461
Total emis	sions (tCO₂e)		82,954,325

This table shows emissions returns received between 1 July 2014 and 30 June 2015. For non-forestry sectors this shows emissions during the 2014 calendar year for all sectors. For Deforesting pre-1990 forest land, the emissions related to the 2014 calendar year, while for post-1989 Forestry Removal Activities, the emissions can relate to the 2014 year, or the 2008–2013 reporting periods.

## Table 6: Total removals by activity

This table shows the total quantity of forestry removals reported in emissions returns by period by participants engaged in schedule 4 Forestry removal activities.

Released under section 89(1) (e)

Sector	Activity	Emissions reporting period	tCO <sub>2</sub> -e removed
Part 1 Forestry removal activities	Forestry removal activities	1 January 2008 to 31 December 2012	962,700
	Forestry removal activities	1 January 2008 to 31 December 2013	3,643
	Forestry removal activities	1 January 2013 to 31 December 2013	1,289,057
	Forestry removal activities	1 January 2013 to 31 December 2014	5,545,053
	Forestry removal activities	1 January 2014 to 31 December 2014	3,438,845
	Forestry removal activities	1 January 2013 to 30 June 2015	510
Total tCO₂e remove	11,239,808		

This table shows the emissions returns received, assessed or amended by the Ministry for Primary Industries and processed by the EPA between 1 July 2014 and 30 June 2015. The emissions reported in this table include any amendments relating to emissions returns originally received in the 2014/15 financial year. Amendments to earlier years' emissions returns are captured in Table 4.2.

Forestry participants are entitled to receive one unit per whole tonne of CO2-e removed. They can choose to report annually and are required to file a mandatory return every 5 years.

#### Table 6.1 Other removal activities

This table shows the total quantity of removals reported in emissions returns by participants engaged in schedule 4 Other Removal Activities.

Released under section 89(1) (e)

Sector	Activity	Removals reported to the EPA (tCO <sub>2</sub> e)
Part 2 Other removal activities	Producing a product with embedded substances	2,999,586
	Exporting hydrofluorocarbons or perfluorocarbons	75,102
Total tCO₂e removed		3,074,688

Other Removal Activities participants are entitled to receive one New Zealand Unit for each two whole tonnes of removals. Removals are voluntarily reported quarterly. The above removals were reported during the 2014/15 financial year, and cover the quarters for the twelve months from 1 April 2014 to 31 March 2015, due to this being the most up-to-date data at the time of reporting.

## Table 7: Compliance with obligations

This table shows the total number of participants who failed to comply with their obligation to submit an emissions return, or surrender or repay units by the specified date.

Released under section 89(1) (f)

	Failure to submit emissions returns	Failure to surrender units	Failure to repay units
Number of participants	118	38	2

All of the reported failures to comply came to light during the 2014/15 financial year, though may not relate to activities within that period.

### Table 8: Total units surrendered

This table shows the total number of units surrendered.

Released under section 89(1) (g)

Total number of units surrendered for emissions		
Units surrendered	32,599,508	
Less units reimbursed	506,326	
Net number of units surrendered	32,093,182	

Participants carrying out activities relating to Liquid Fossil Fuels, Stationary Energy, Waste, and Industrial Processes (including Synthetic Greenhouse Gases) are liable to surrender one unit for each two whole tonnes of emissions from these activities.

There is no surrender obligation for participants engaged in Agricultural activities for the 2014 reporting year.

Units may be reimbursed if an amendment to an emissions return identifies that the participant surrendered too many units.

# Table 9: Total New Zealand Units transferred for removal activities

This table shows the total number of New Zealand Units transferred for removal activities.

Released under section 89(1) (h)

#### Total number of New Zealand Units transferred for removal activities

12,830,642

This table relates to the units transferred to participants between 1 July 2014 and 30 June 2015.

Other Removal Activities participants are entitled to receive one New Zealand Unit for each two whole tonnes of removals while carrying out their activity. Forestry removal participants are entitled to receive one New Zealand Unit for each whole tonne of removals while carrying out their activity.

The number of New Zealand Units transferred for removal activities shown above represents gross entitlement transfers and does not take into account repayments. Account repayments may occur if an amendment to an emissions return identifies that a participant over-reported their removals, and therefore received too many units.

Forestry removals repayments during the 2014/15 financial year may relate to any of the previous reporting years. Returns relating to previous reporting years are reflected in Table 4.2. Forestry participants must repay one emission unit for each whole tonne of CO<sub>2</sub>-e that was over-reported.

### Table 10: Total New Zealand Units allocated

This table shows the total number of New Zealand Units allocated under sub-part 2 of part 4 of the Act, less units repaid.

Released under section 89(1) (i)

	Units allocated
Total number of New Zealand Units allocated	5,135,429
Less units repaid	33,958
Net number of New Zealand Units allocated	5,101,471

This table shows units transferred to eligible people between 1 July 2014 and 30 June 2015:

- For the forestry and fishing sectors, there was a one-off allocation under the Forestry Allocation Plan and
  the Fishing Allocation Plan. All transfers were completed before this reporting year, with the exception of
  eligible applicants who have not yet completed the NZEUR account opening process.
- For Industrial Allocation there are annual allocations.

## Table 11: Payment of money to meet surrender obligations

This table shows the total sum of money paid to a Crown bank account or paid by the EPA.

Released under section 89(1) (j) (k)

	Money paid
Total sum of money paid to a Crown bank account instead of surrendering units to cover emissions	\$600
Total sum of money paid by the EPA instead of reimbursing units	\$0

The information in this table shows payments made between 1 July 2014 and 30 June 2015.

The Act allows participants to meet their emissions surrender obligations through paying money, or a combination of paying money and surrendering units. A participant may satisfy their obligation to surrender units by paying a sum of \$25 for each unit they are liable to surrender into a Crown bank account.

### **Further Information**

Refer to the websites below for further information about climate change and the Emissions Unit Register:

For up-to-date information on participants registered in the NZ ETS, visit the NZEUR website: www.eur.govt.nz

Frequently asked questions for Industrial Allocations:

https://www.climatechange.govt.nz/emissions-trading-scheme/participating/industry/faq.html

Directions for NGAs, PRE and PFSI are published on the NZEUR website, and detail the actual number of emission units transferred:

www.app.eur.govt.nz/eats/nz/index.cfm?fuseaction=approval\_log.direction&clearfuseattribs=true

The Ministry for the Environment (MfE) publishes the number of emission units available to PRE participants through their contracts (however, not the actual number of emission units transferred) on the PRE webpage:

www.mfe.govt.nz/climate-change/reducing-greenhouse-gas-emissions/former-government-initiatives

MfE publishes the total number of units allocated to PRE and PFSI in their annual net position report that projects New Zealand's greenhouse gas emissions over the first commitment period of the Kyoto Protocol (2008–2012). The latest report is available at: <a href="https://www.mfe.govt.nz/climate-change/reporting-greenhouse-gas-emissions/nzs-net-position-under-kyoto-protocol">www.mfe.govt.nz/climate-change/reporting-greenhouse-gas-emissions/nzs-net-position-under-kyoto-protocol</a>