



Environmental
Protection Authority
Te Mana Rauhi Taiao

CLIMATE CHANGE RESPONSE ACT 2002

2015 Emissions Trading Scheme Report

for the period 1 July 2015 to 30 June 2016, under section 89 of the Climate Change Response Act 2002



Introduction

The Environmental Protection Authority (EPA) publishes the following information in accordance with section 89 of the Climate Change Response Act 2002 (the Act).

All reported information:

- is current to 5am New Zealand Standard Time (NZST) 1 July 2016 and relates to activities that were reported during the 2015/16 financial year (1 July 2015 to 30 June 2016)
- represents actual unit transfers recorded in the New Zealand Emission Trading 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

2015 Emissions Trading Scheme Report	1
Introduction	2
Table of Contents	3
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 4.1 Total amended quantity of emissions reported in previous years	9
Table 4.2 Total amended quantity of removals reported in previous years	9
Table 5: Total emissions by activity	10
Table 6: Total removals by activity	11
Table 6.1 Other removal activities	12
Table 7: Compliance with obligations	12
Table 8: Total units surrendered	13
Table 9: Total New Zealand Units transferred for removal activities	13
Table 10: Total New Zealand Units allocated.....	14
Table 11: Payment of money to meet surrender obligations	14
Further Information	15

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 2016
Part 1 Forestry	Deforesting pre-1990 forest land	11	54	45
Part 2 Liquid Fossil Fuels	Owning obligation fuel	0	0	5
Part 3 Stationary Energy	Importing coal	0	0	4
	Mining coal	1	1	20
	Importing natural gas	0	0	2
	Mining natural gas	0	1	47
	Using geothermal fluid	0	0	12
	Combusting used or waste oil, tyres, or waste	0	0	4
	Using crude oil	0	0	4
Part 4 Industrial Processes	Producing iron or steel	0	0	2
	Producing aluminium	0	0	1
	Producing clinker or burnt lime	1	1	4
	Producing glass using soda ash	0	0	2
	Operating electrical switchgear that uses sulphur hexafluoride	1	0	7
	Importing hydrofluorocarbons or perfluorocarbons	3	1	15
	Importing or manufacturing synthetic fertilisers containing nitrogen	0	1	11
Part 5 Agriculture	Slaughtering ruminant animals, pigs, horses, or poultry	2	2	43
	Dairy processing of milk or colostrum	1	0	14
	Exporting from New Zealand live cattle, sheep, or pigs	0	0	12

Sector	Activity	Number of Participants added	Number of participants removed	Total number of participants as at 30 June 2016
Part 6 Waste	Operating a disposal facility	0	0	34
Total participants added or removed (Schedule 3 Activities)		20	61	288

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 NZETR website:

www.emissionsregister.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	Number of Participants added	Number of participants removed	Total number of participants as at 30 June 2016
Part 1 Forestry Removal Activities	Owning post-1989 forest land	40	90	2012
	Holder post-1989 forestry right	6	5	90
	Holder post-1989 forestry lease	5	29	13
Part 2 Other Removal Activities	Producing a product with embedded substances	0	0	1
	Exporting hydrofluorocarbons or perfluorocarbons	3	1	9
Part 3 Liquid Fossil Fuels	Purchasing obligation jet fuel	0	0	5
Part 4 Stationary Energy	Purchasing natural gas	0	0	3
	Purchasing coal	0	0	3
Total participants added or removed (Schedule 4 Activities)		54	125	2136

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 NZETR website:

www.emissionsregister.govt.nz

Table 3: Activities reported

This table shows the type of 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 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
		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 2015/16 financial year.

Released under section 89(1)(d)

Total quantity of emissions reported in emissions returns	Total quantity of removals reported in emissions returns
74,016,414 tCO ₂ e ¹ emissions	9,891,712 tCO ₂ 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 2015 and 30 June 2016, and includes:

- Emissions reported for the 2015 calendar year for all activities in the NZ ETS
- Removals between 1 January 2008 and 31 December 2015 for the Forestry Removals sector, and
- Removals between 1 April 2015 and 31 March 2016 for Other Removal Activities.

¹ tCO₂e: Carbon dioxide equivalent (CO₂e) 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 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 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 ₂ e)	Total quantity of emissions after amendments and including forestry emissions (tCO ₂ e)	Change in emissions reported (tCO ₂ e)
2014	82,954,324	82,971,233	16,909
2013	97,405,541	97,408,813	3,272
2012	87,838,242	87,822,267	-15,975
2011	32,555,734	32,555,725	-9
2010	33,257,657	33,257,657	0

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 emissions 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, 2013, and 2014 calendar years and the amended figures.

Released under section 89(1)(d)

Year	Total quantity of removals previously reported (tCO ₂ e)	Total quantity of removals after amendments to emissions returns (tCO ₂ e)	Change in removals reported (tCO ₂ e)
2014	14,314,496	14,383,483	68,987
2013	19,531,777	19,527,871	-3,906
2012	24,189,218	24,186,672	-2,546

The figures relate to actual removals for each period reported.

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 2015 to 30 June 2016 (tCO ₂ e)
Schedule 3	Part 1 Forestry	Deforesting pre-1990 forest land	644,994
	Part 2 Liquid fossil fuels	Owning obligation fuel	15,947,179
		Importing coal	1,093,225
	Part 3 Stationary energy	Mining coal	1,328,894
		Importing natural gas	22,550
		Mining natural gas	10,058,649
		Using geothermal fluid	857,530
		Combusting used or waste oil, tyres, or waste	49,108
		Using crude oil	6,385
		Part 4 Industrial processes	Producing iron or steel
	Producing aluminium		596,653
	Producing clinker or burnt lime		811,267
	Producing glass using soda ash		14,846
	Operating electrical switchgear that uses sulphur hexafluoride		5,775
	Importing hydrofluorocarbons or perfluorocarbons		846,567
	Part 5 Agriculture	Importing or manufacturing synthetic fertilisers containing nitrogen	2,607,554
		Slaughtering ruminant animals, pigs, horses, or poultry	15,773,489
		Dairy processing of milk or colostrum	15,828,326
		Exporting from New Zealand live cattle, sheep, or pigs	28,046
Part 6 Waste		Operating a disposal facility	1,328,949
Sub-total schedule 3 emissions			67,907,514
Schedule 4	Part 1 Forestry removal activities	Harvesting post-1989 land or removing post-1989 land from the Emissions Trading Scheme	458,055

Schedule	Sector	Activity	Emissions reported to the EPA from 1 July 2015 to 30 June 2016 (tCO ₂ e)
	Part 3 Liquid fossil fuels	Purchasing obligation jet fuel	1,213,221
	Part 4 Stationary energy	Purchasing natural gas	1,321,092
		Purchasing coal	3,116,532
Sub-total schedule 4 emissions			6,108,900
Total emissions (tCO₂e)			74,016,414

This table shows emissions returns received between 1 July 2015 and 30 June 2016. For non-forestry sectors this shows emissions during the 2014 calendar year for all sectors. For Deforesting pre-1990 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 ₂ e removed
Part 1 Forestry removal activities	Forestry removal activities	1 January 2008 to 31 December 2012	107,796
	Forestry removal activities	1 January 2013 to 31 December 2013	73
	Forestry removal activities	1 January 2013 to 31 December 2014	301,039
	Forestry removal activities	1 January 2013 to 31 December 2015	522,421
	Forestry removal activities	1 January 2013 to 30 June 2016	41,957
	Forestry removal activities	1 January 2014 to 31 December 2014	54,097
	Forestry removal activities	1 January 2014 to 31 December 2015	454,033
	Forestry removal activities	1 January 2015 to 31 December 2015	5,648,317
	Forestry removal activities	1 January 2015 to 30 June 2016	547
Total tCO₂e removed			7,130,280

This table shows the emissions returns received, assessed, or amended by the Ministry for Primary Industries and processed by the EPA between 1 July 2015 and 30 June 2016. The emissions reported in this table include any amendments relating to emissions returns originally received in the 2015/16 financial year. 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 ₂ e)
Part 1 Other removal activities	Producing a product with embedded substances	2,585,583
	Exporting hydrofluorocarbons or perfluorocarbons	175,849
Total tCO₂e removed		2,761,432

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 2015/16 financial year, and cover the quarters for the twelve months from 1 April 2015 to 31 March 2016, 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)

	Failed to submit emissions returns	Failed to surrender units	Failed to repay units
Number of participants	22	10	0

All of the reported failures to comply came to light during the 2015/16 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	20,427,425
Less units reimbursed	8,326
Net number of units surrendered	20,419,099

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
8,522,341

This table relates to the units transferred to participants between 1 July 2015 and 30 June 2016.

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 2015/16 financial year may relate to any of the previous reporting years. Forestry participants must repay one emission unit for each whole tonne of CO₂-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	4,682,188
Less units repaid	38,167
Net number of New Zealand Units allocated	4,644,021

This table shows units transferred to eligible people between 1 July 2015 and 30 June 2016:

- 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 NZETR 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	\$775
Total sum of money paid by the EPA instead of reimbursing units	\$0

The information in this table shows payments made between 1 July 2015 and 30 June 2016.

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 Emission Trading Register.

For up-to-date information on participants registered in the NZ ETS, visit the NZETR website:

www.emissionsregister.govt.nz

Frequently asked questions relating to Industrial Allocations:

<http://www.mfe.govt.nz/climate-change/reducing-greenhouse-gas-emissions/new-zealand-emissions-trading-scheme/industry-8>