



## **NEW ZEALAND**

### **Submission to the ADP**

#### **New Zealand's Intended Nationally Determined Contribution**

**7 July 2015**

New Zealand hereby communicates its intended nationally determined contribution and the accompanying information to facilitate clarity, transparency and understanding (decisions 1/CP.19 and 1/CP.20 refer).

Regarding the invitation to Parties to consider communicating their undertakings in adaptation planning, please refer to Chapter 6 of New Zealand's 6<sup>th</sup> national communication submitted to the UNFCCC in December 2013.<sup>1</sup>

New Zealand commits to reduce GHG emissions to 30% below 2005 levels by 2030.

New Zealand's INDC will remain provisional pending confirmation of the approaches to be taken in accounting for the land sector, and confirmation of access to carbon markets. New Zealand will participate actively in discussions on the land sector with our negotiating partners, both in the lead-up to and after COP 21, and will confirm details of the accounting approach we will take prior to or upon ratification of the Paris agreement. In order to achieve domestic reductions and to do so at an affordable cost, we have identified a need for cost-effective mitigation technology, and in particular that our continuing investment in agricultural research delivers results that can be commercialised within the time period covered by this contribution.

New Zealand will communicate its final NDC following agreement on the rules to apply in the above areas.

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<sup>1</sup> [http://unfccc.int/files/national\\_reports/annex\\_i\\_natcom/submitted\\_natcom/application/pdf/sixth-national-communication\\_20131220\[1\].pdf](http://unfccc.int/files/national_reports/annex_i_natcom/submitted_natcom/application/pdf/sixth-national-communication_20131220[1].pdf)

## Information to facilitate clarity, transparency and understanding

Time period	2021 to 2030
Type of commitment	Absolute reduction from base year emissions managed using a carbon budget.
Base year	1990
Reduction level	Emissions will be reduced to 30% below 2005 levels by 2030. The 2005 reference has been chosen for ease of comparability with other countries. This responsibility target corresponds to a reduction of 11% from 1990 levels.
Scope and coverage	The target is economy-wide covering all sectors: <ul style="list-style-type: none"> <li>• Energy</li> <li>• Industrial processes and product use</li> <li>• Agriculture</li> <li>• Forestry and other land use</li> <li>• Waste</li> </ul> and all greenhouse gases: <ul style="list-style-type: none"> <li>• CO<sub>2</sub></li> <li>• CH<sub>4</sub></li> <li>• SF<sub>6</sub></li> <li>• HFCs</li> <li>• PFCs</li> <li>• N<sub>2</sub>O</li> <li>• NF<sub>3</sub></li> </ul>
Methodological approaches for estimating anthropogenic greenhouse gas emissions and removals	This INDC was prepared using 100 year Global Warming Potentials (GWPs) from the IPCC 4 <sup>th</sup> assessment report, the IPCC 2006 greenhouse gas inventory methodologies, and the 2013 IPCC KP Supplement.

New Zealand's INDC assumes that any rules agreed between Parties will allow for the following:

Approach to accounting for the land sector (agriculture, forestry and other land uses)

Application of accounting methodologies that build on existing IPCC guidance where available (including the 2006 IPCC Guidelines and the 2013 IPCC Kyoto Protocol supplement), recognising the specific biophysical characteristics of the land sector and the need to manage multiple objectives, including global food security.

Accounting will be land or activity-based, recognise permanent and additional carbon stock changes, and include provisions to address natural disturbance, permanence, land-use flexibility, legacy and non-anthropogenic effects. Harvested wood products accounting will be on the basis of a production approach.

Use of international market mechanisms:

Unrestricted access to global carbon markets that enable trading and use of a wide variety of units that meet reasonable standards and guidelines to:

- ensure the environmental integrity of units/credits generated or purchased
- guard against double-claiming/double-counting, and
- ensure transparency in accounting.

New Zealand will finalise this INDC following full and final agreement on the accounting rules/guidelines to apply in the above areas, or confirmation in Paris that accounting rules agreed post-Paris will not be applied retroactively.

## National circumstances<sup>2</sup>

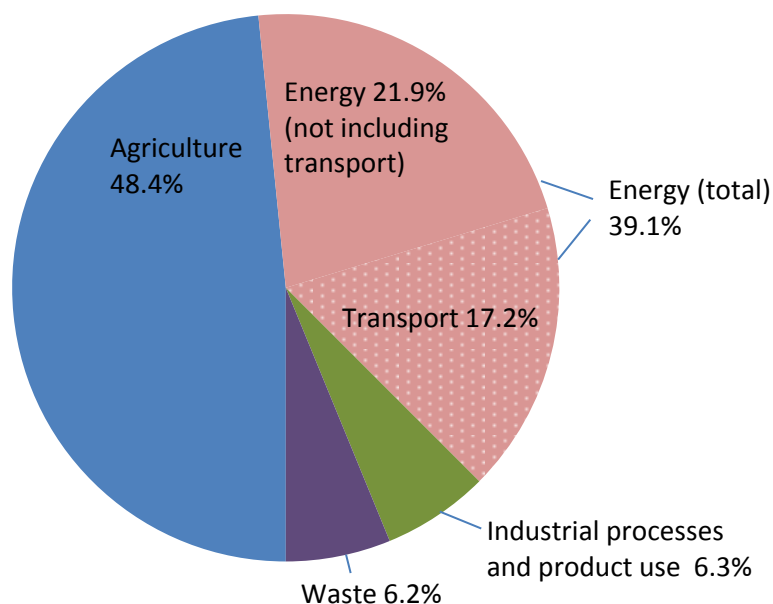
New Zealand is a small, narrow, island country with an open, trade reliant economy that is founded in our land sector. We are dependent on road transport to service a small (but growing) and widely distributed population (4.6 million as of March 2015 at a density of 17 people per square kilometre). Māori (New Zealand's indigenous people) make up 14.9 percent of New Zealand's population.

New Zealand has abundant, diverse renewable energy resources and a proud history of renewable energy development. Around 80 percent of our electricity has come from renewable sources in recent years – this is among the highest in the OECD. We are making progress towards reaching our target of 90 percent of electricity coming from renewable sources by 2025.

The emissions intensity of New Zealand's economy has decreased by 33 percent since 1990. In 2013 New Zealand produced approximately 400 tonnes of CO<sub>2</sub>-equivalent per unit of GDP<sup>3</sup>.

Our land sector is central to New Zealand's economy; it is also a key economic and spiritual resource for Māori. Around 74 percent of New Zealand's exports come from the land sector. Agricultural emissions derived from the production of food for the rest of the world account for approximately half of our total greenhouse gas emissions. However, New Zealand is one of the most efficient agricultural producers in the world.

**New Zealand's 2013 greenhouse gas emissions by sector**  
(as reported in its national inventory report submitted to the UNFCCC in April 2015)



<sup>2</sup> Further information on New Zealand's national circumstances can be found in Chapter 2 of New Zealand's 6<sup>th</sup> national communication:

[http://unfccc.int/files/national\\_reports/annex\\_i\\_natcom/submitted\\_natcom/application/pdf/sixth-national-communication\\_20131220\[1\].pdf](http://unfccc.int/files/national_reports/annex_i_natcom/submitted_natcom/application/pdf/sixth-national-communication_20131220[1].pdf)

<sup>3</sup> Emissions intensity decrease is on a gross emissions basis. GDP unit is millions of NZD in 2009/10 prices.

Our forests are also important. Our planted forests have enabled the phase out of timber from our natural, indigenous forests, protecting these original forests and providing a sustainable supply of timber and wood products for both export and domestic use. Historical forest planting and resulting harvest cycles also have a significant impact on New Zealand's emissions (removals by forest land were 33 percent of gross emissions in 2013) and will continue to do so well into the future.

New Zealand's policy response to climate change is informed by a combination of its unique national circumstances, the level of its targets, and recognition that climate change is a global long-term issue necessitating a global response. New Zealand is committed to being part of this response and has gazetted a target of reducing emissions to 50 percent of 1990 levels by 2050.

The Climate Change Response Act 2002 (the Act) contains the legal framework which enables New Zealand to meet its international climate change obligations. The Act was amended in 2008 to encompass the New Zealand Emissions Trading Scheme (NZ ETS) which is New Zealand's principal policy response for reducing domestic emissions and its primary mechanism to meet international emissions reduction commitments.

New Zealand also works with others to influence emissions well beyond our own footprint. New Zealand has a long-standing commitment to providing leadership in research, innovation and technical solutions to reduce greenhouse gas emissions from agriculture, and sharing this knowledge internationally. The New Zealand Agricultural Greenhouse Gas Research Centre<sup>4</sup> was established to deliver knowledge, technologies and practices to enable New Zealand to enhance agricultural productivity in a carbon constrained world.

New Zealand was a founding member of the Global Research Alliance on Agricultural Greenhouse Gases (GRA).<sup>5</sup> The GRA was established with the aim of increasing international cooperation, collaboration and investment in agricultural greenhouse gas research, to find ways to grow more food without growing greenhouse gas emissions. New Zealand is also an active member of the Friends of Fossil Fuel Subsidy Reform group, and a member of the Climate and Clean Air Coalition.

### **Consultation on the INDC**

Prior to taking decisions on its INDC, the New Zealand Government undertook a public consultation process including publication of a discussion document, public meetings, hui and an invitation to make submissions. Over 17,000 written submissions were received from more than 15,600 submitters. The consultation document (*New Zealand's climate change target*) and related publications (*A general equilibrium analysis of options for New Zealand's post-2020 climate change contribution*, and *Modelling the economic impact of New Zealand's post-2020 climate change contribution*) are available on the Ministry for the Environment's website<sup>6</sup>.

### **Fairness and ambition:**

#### **Fairness:**

It is important to New Zealand that the international community shares the effort required to combat climate change in a fair manner. Each Party must contribute to the extent its circumstances permit. Although New Zealand is responsible for low levels of emissions now

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<sup>4</sup> <http://www.nzagrc.org.nz/>

<sup>5</sup> <http://www.globalresearchalliance.org/>

<sup>6</sup> <http://www.mfe.govt.nz/publications/climate-change/new-zealands-climate-change-target-our-contribution-new-international>

and historically (0.15 percent of global emissions in 2012), New Zealand is committed to doing its fair share in working towards a multilateral climate change solution.

The likely cost to the New Zealand economy of meeting the 2030 target in terms of GDP is greater than that implied by other Parties' tabled targets. This is due to a number of factors, such as already achieving a high level of renewable electricity generation, and almost half of New Zealand's emissions originating from agriculture.

**Ambition:**

New Zealand has set an economy-wide target of 30 percent below 2005 levels by 2030 (which equates to 11 percent below 1990 levels). New Zealand also has a longer term target of reducing emissions to 50 percent below 1990 levels by 2050.

The dominance of biological methane and transport emissions in New Zealand's emissions profile pose particular challenges to our transformation to a low emissions economy. Nonetheless we are taking serious action on each. New Zealand has committed \$45 million to the Global Research Alliance on Agricultural Greenhouse Gases out to June 2019 and a further \$48.5 million through the New Zealand Agricultural Greenhouse Gas Research Centre for research into technology to reduce agricultural greenhouse gas emissions. Maintaining support for this research will continue to be a priority for us.

On transport, in principle New Zealand is well placed to take advantage of its existing baseload of renewable sources of electricity generation (approximately 80 percent in 2014). We have set a target of increasing renewable generation to 90 percent by 2025. This will further support transformation of our transport sector.

Transformation of the transport and agriculture sectors will take longer than the 2021-2030 period covered by this INDC. New Zealand's long-term emission pathway anticipates accelerated emission reductions post 2030 once agricultural mitigation technology becomes more widely applied and uptake of low-emission transport technology increases.

We recognise tackling atmospheric stocks of carbon dioxide as our most pressing collective problem. The limited domestic abatement potential available to New Zealand requires us to make use of global carbon markets to be able to make a contribution that progresses beyond our current target, as this INDC does.

This INDC represents a progression beyond New Zealand's current target, not only in terms of headline number, but also in terms of cost and emissions impact. It also represents a significant reduction from BAU emissions and continuing improvement in the emissions efficiency of the New Zealand economy. The contribution is consistent with the conditional target range pledged by New Zealand at COP 16.