



Interaction between the voluntary carbon market, New Zealand's accounting under the Kyoto Protocol and the New Zealand Emissions Trading Scheme



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| <b>Interaction between the voluntary carbon market, New Zealand's accounting under the Kyoto Protocol and the New Zealand Emissions Trading Scheme</b> | <b>1</b> |
| <b>What is carbon offsetting?</b>  | <b>1</b> |
| <b>What is the compliance carbon market?</b>   | <b>1</b> |
| <b>What is the voluntary carbon market?</b>  | <b>1</b> |
| <b>How do voluntary and compliance carbon markets interact?</b>  | <b>1</b> |
| <b>What is the double counting issue?</b>  | <b>2</b> |
| <b>What land-based activities does New Zealand account for under the Kyoto Protocol?</b>   | <b>2</b> |
| <b>What land-based activities are included in the New Zealand Emissions Trading Scheme, and how these activities are accounted for?</b>                | <b>3</b> |



This paper provides an overview of the interaction between the voluntary carbon market, New Zealand's accounting under the Kyoto Protocol and the New Zealand Emissions Trading Scheme in the context of the agriculture and forestry sectors.

## What is carbon offsetting?

An offset project comprises a set of activities that reduce or sequester greenhouse gasses and is undertaken voluntarily. This means the activity is not required for compliance with existing regulations or international agreements. For every tonne of carbon dioxide equivalent that a project reduces or sequesters, often compared to a baseline of what would have happened in the absence of the project, a carbon offset<sup>1</sup> is produced.

All offset projects are voluntary in the sense that emission reductions or increased sequestration undertaken by offset project developers are discretionary. There are two types of markets in which offsets are bought and sold – the compliance carbon market and the voluntary carbon market.

## What is the compliance carbon market?

The compliance market serves buyers that must meet regulatory requirements, such as an obligation to surrender units through an emission trading scheme. Participants in the New Zealand Emissions Trading Scheme operate in a compliance carbon market.

## What is the voluntary carbon market?

The voluntary market serves buyers that are purchasing offsets either to meet voluntary greenhouse gas emission reduction or offset targets, or to enhance their reputation and standing with the general public, investors, customers and employees. Purchasing offsets allows businesses, governments, NGOs, and individuals to counteract the effects of their emissions.

## How do voluntary and compliance carbon markets interact?

The voluntary and compliance markets have different criteria for defining a legitimate offset or emissions reduction credit. The compliance carbon market defines legitimacy through regulation and legislation. The voluntary carbon market is largely unregulated but a number of standards exist that define how an offset can be produced.<sup>2</sup> Voluntary carbon market project developers can choose the standard that they want their project verified under.

Compliance carbon credits can be sold into the voluntary carbon market and cancelled. However, voluntary units cannot be sold into compliance markets.

The key issues that have been raised regarding the interaction of the voluntary and compliance carbon markets are double counting and the different stringency of standards and protocols between the markets.

## What is the double counting issue?

Double counting occurs when two entities 'take credit' for a single emission reduction or sequestration, or when the same entity claims an emission reduction or removal twice.

Double counting can occur in a variety of circumstances. For example, New Zealand must account (claim credit) under the Kyoto Protocol for all carbon stock changes that occur over the period 2008-2012 on land that has been afforested since 1990. If a forest owner were to also claim a voluntary credit for this same sequestration then most voluntary standard providers would consider this to be double counting as both the government and the forest owner are taking credit for the sequestration.

To address the double counting issue, most voluntary carbon market standard providers have stated that issuing voluntary units for activities covered under a country's Kyoto Protocol accounting constitutes 'double counting'. However, not all land use activities are covered under the New Zealand Kyoto Protocol accounting. This may provide opportunities for voluntary carbon market projects in the land-based sectors.

## What land-based activities does New Zealand account for under the Kyoto Protocol?

The following table provides an overview of the activities and sectors that New Zealand accounts for during the first commitment period of the Kyoto Protocol.

| New Zealand accounts for:   | New Zealand does not account for:   |
|---|---|
| <ul style="list-style-type: none"><li>• <b>Afforestation</b> is the direct human-induced conversion of land that has not been forested for a period of at least 50 years to forested land through planting, seeding and/or the human-induced promotion of natural seed sources</li><li>• <b>Reforestation</b> is the direct human-induced conversion of non-forested land to forested land through planting, seeding and/or the human-induced promotion of natural seed sources, on land that was forested but that has been converted to non-forested land. For the first commitment period, reforestation activities will be limited to reforestation occurring on those lands that did not contain forest on 31 December 1989</li><li>• <b>Deforestation</b> is the direct human-induced conversion of forested land to non-forested land; and</li><li>• <b>Agricultural emissions</b> include methane from livestock, nitrous oxide from animal excrement and the use of nitrogen fertiliser.</li></ul> | <ul style="list-style-type: none"><li>• <b>Forest Management</b> is a system of practices for stewardship and use of forest land aimed at fulfilling relevant ecological (including biological diversity), economic and social functions of the forest in a sustainable manner</li><li>• <b>Revegetation</b> is a direct human-induced activity to increase carbon stocks on sites through the establishment of vegetation that covers a minimum area of 0.05 hectares and does not meet the definitions of afforestation and reforestation</li><li>• <b>Cropland management</b> is the system of practices on land on which agricultural crops are grown and on land that is set aside or temporarily not being used for crop production; and</li><li>• <b>Grazing-land management</b> is the system of practices on land used for livestock production aimed at manipulating the amount and type of vegetation and livestock produced.</li><li>• <b>Soil carbon.</b> New Zealand does not, account for soil carbon stock changes unless it is related to an activity New Zealand accounts for such as afforestation or deforestation.</li></ul> |

New Zealand must account for carbon stock changes that occur over the period 2008-2012 on land that has been afforested, reforested and deforested<sup>3</sup> as a result of direct human action

since 1990. In other words, these activities must have occurred since 1990 but are accounted for (measured) over the first commitment period, 2008-2012.

New Zealand must also account for agricultural emissions that occur over the first commitment period, 2008-2012. Emissions from the agricultural sector mainly consist of methane from livestock, and nitrous oxide from animal excrement and the use of nitrogen fertiliser. New Zealand does not, however, account for soil carbon stock changes (unless related to an activity New Zealand accounts for such as afforestation or deforestation).

## What land-based activities are included in the New Zealand Emissions Trading Scheme, and how these activities are accounted for?

The New Zealand Emissions Trading Scheme (NZ ETS) closely follows New Zealand's accounting under the Kyoto Protocol. The agricultural sector will enter the NZ ETS in 2013. Participants will be required to surrender emission units for all emissions that occur on or after 1 January 2013. The first due date they must surrender units by is 30 April 2014 for the period 1 January 2013 to 31 December 2013.

Consistent with New Zealand's international obligations from 1 January 2008 individuals undertaking deforestation must surrender units, while those undertaking afforestation and reforestation activities (referred to as post-1989 forests) can earn units. The NZ ETS does not cover carbon stock changes that occur in the period prior to 1 January 2008. This should avoid any double counting concerns for any voluntary carbon market forestry projects where voluntary units are generated from carbon stock increases prior to 1 January 2008. However, to generate a voluntary unit from an afforestation and reforestation activity post 1 January 2008 potential double counting issues may need to be managed.

Because all NZUs generated by post-1989 forests in the NZ ETS are backed by a Kyoto unit in the Government's registry account this avoids any double counting concerns between the NZ ETS and New Zealand's accounting under the Kyoto Protocol. The same is true for the Permanent Forest Sink Initiative which receives AAUs directly from the Government's allocation under the Kyoto Protocol.

New Zealand did not include forest management, revegetation, cropland management, or grazing-land management in the NZ ETS. Therefore, for the first commitment period at least, there will be no double counting issues if individuals undertake these activities in New Zealand as part of voluntary carbon market projects.

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### Footnotes

<sup>1</sup> Offsets are known by a number of names, including: carbon credits, Verified/Voluntary Emission Reductions (VERs), New Zealand Units (NZUs), Assigned Amount Units (AAUs), and Certified Emission Reductions (CERs), EUAs.

<sup>2</sup> A Comparison of Carbon Offset Standards is available from:  
[http://assets.panda.org/downloads/vcm\\_report\\_final.pdf](http://assets.panda.org/downloads/vcm_report_final.pdf)

<sup>3</sup> The Annex of Decision 16/CMP.1 U.N. Doc. FCCC/KP/CMP/2005/8/Add.3 defines these terms. <http://unfccc.int/resource/docs/2005/cmp1/eng/08a03.pdf#page=3>