## Session SBI41 (2014)

Session started at 01-09-2014 00:00:00 [GMT+1] Session closed at 28-11-2014 23:59:59 [GMT+1]



A compilation of questions to - and answers by – New Zealand

Exported 29/11-2014 by the

UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

Question from: United States of America at Tuesday, 28 October 2014 Category: Assumptions, conditions and methodologies related to the attainment of its quantified economy-wide emission reduction target

Title: Double counting prevention

How do you plan to prevent double counting with the host countries of projects that generated CERs that your country plans to use towards meeting its pledge in the pre-2020 period?

If a host country refuses to adjust its reporting towards its progress to its targets to reflect CERs it exported, do you still plan to count them?

## Answered by: New Zealand at Thursday, 27 November 2014

New Zealand is committed to transparency and the prevention of double counting. At this stage it is unclear whether New Zealand will require CERs to meet its pre-2020 target. If it does, New Zealand will look for ways to ensure the CERs it uses are not being double counted. The best means of dealing with this issue would be for countries intending to participate in international trading to have processes in place to prevent double counting.

## Question from: United States of America at Tuesday, 30 September 2014

Category: Progress towards the achievement of its quantified economy-wide

emission reduction target **Title:** Question #2 for NZ

How does New Zealand monitor and evaluate progress on its policies and measures?

## Answered by: New Zealand at Thursday, 27 November 2014

New Zealand monitors and evaluates the progress of its climate change policies and measures in a number of ways. New Zealand fulfils its international reporting obligations by producing annual greenhouse gas inventories, national communications every four years, and biennial reports. New Zealand regards the annual greenhouse gas inventory as the main document providing a high-level indication on the progress its policies and measures are having on greenhouse gas emissions and removals trends.

New Zealand also regularly reviews and assesses the functioning and performance of its primary measure to reduce emissions, the New Zealand Emissions Trading Scheme (NZ ETS). New Zealand has an NZ ETS review planned for 2015, which is likely to include modelling of ETS impacts at a sector level. The Ministry for the Environment has initiated a work programme to ensure that the NZ ETS and its

impacts are monitored and evaluated over time. In addition, bottom-up modelling is being conducted as part of the development of New Zealand's INDC.

# Question from: United States of America at Tuesday, 30 September 2014

Category: All emissions and removals related to its quantified economy-wide

emission reduction target **Title:** Question #1 for NZ

As the review team noted, New Zealand did not estimate the impacts of most of the mitigation actions reported in CTF table 3. Is New Zealand considering conducting bottom-up modeling to quantify the likely impact of potential mitigation actions?

**Answered by:** New Zealand at Thursday, 27 November 2014

The models used to project emissions are top down models, which implicitly include the effect of existing policies — it is therefore not possible to isolate the effect of individual policies and measures using this approach. The New Zealand Emissions Trading Scheme (NZ ETS) is considered to be responsible for the majority of the reported projected mitigation impact and most other climate related policies aim to remove market barriers around the NZ ETS. Because of the broad range of coverage of the New Zealand Emissions Trading Scheme, providing estimates of the effects of individual policies could also lead to issues of double counting.

New Zealand has an NZ ETS review planned for 2015, which is likely to include modelling of ETS impacts at a sector level. The Ministry for the Environment has initiated a work programme to ensure that the NZ ETS and its impacts are monitored and evaluated over time. In addition, bottom-up modelling is being conducted as part of the development of New Zealand's INDC.

#### Question from: Japan at Tuesday, 30 September 2014

**Category:** Assumptions, conditions and methodologies related to the attainment of its quantified economy-wide emission reduction target

Title: Assumptions of GHG projections

Many variables are reported as assumptions of GHG projections in the NC. How were these variables set?

Are these assumptions consistent with socio-economic predictions in other national plans?

**Answered by:** New Zealand at Thursday, 27 November 2014

Information on methodologies and assumptions used for greenhouse gas projections for different sectors are presented in detail in Chapter 5 (*Projections and the total effect of policies and measures*) of New Zealand's Sixth National Communication.

New Zealand's projections of emissions are produced by a multi-agency technical group from across government, and the projection methodology is closely linked to the methodology used to estimate emissions and removals in New Zealand's annual greenhouse gas inventory, in accordance with IPCC good practice guidance. For most sectors, the assumptions used are consistent with assumptions used in other national plans or reports. For example in the energy sector projections presented in the Sixth National Communication and First Biennial Report, the crude oil price, coal price, exchange rates, gas discoveries and population growth assumptions are the same as those used in the "Mixed Renewables" scenario in *New Zealand's Energy Outlook: Electricity Insight*, which can be downloaded here: http://www.med.govt.nz/sectors-industries/energy/energy-modelling/modelling/new-zealands-energy-outlook-electricity-insight.

Question from: Brazil at Tuesday, 30 September 2014

Category: Progress towards the achievement of its quantified economy-wide

emission reduction target **Title:** Lack of quantification

Please, provide the reasons for the lack of quantified reduction of emissions regarding many planned actions that have been reported in Table 3 under the CTF.

**Answered by:** New Zealand at Thursday, 27 November 2014

The models used to project emissions are top-down models, which implicitly include the effect of existing policies — it is therefore not possible to isolate the effect of individual policies and measures using this approach. The New Zealand Emissions Trading Scheme (NZ ETS) is considered to be responsible for the majority of the reported projected mitigation impact and most other climate related policies aim to remove market barriers around the NZ ETS. Because of the broad range of coverage of the NZ ETS, providing estimates of the effects of individual policies could also lead to issues of double counting.

## Question from: Brazil at Tuesday, 30 September 2014

**Category:** Assumptions, conditions and methodologies related to the attainment of its quantified economy-wide emission reduction target

Title: 5% as target

At COP-15, New Zeland placed a number of conditions to expand the target from 10% to 20%. In the biennial report, there is not an explanation on how or if such conditions have been fulfilled by the country. In addition, New Zeland adopted 5% as the target.

Please, explain the reasons for reducing the target to 5%.

## **Answered by:** New Zealand at Thursday, 27 November 2014

To clarify, New Zealand's unconditional responsibility target has always been a five per cent reduction in greenhouse gas emissions on 1990 levels by 2020, and was never reduced from 10 per cent. New Zealand chose a five per cent target because it is more ambitious than our Kyoto Protocol first Commitment Period target, and represents our fair share towards international climate change efforts as it is broadly in line with the actions of comparator countries.

Alongside this unconditional minus 5 per cent responsibility target for 2020, New Zealand also has a conditional target range of a 10 to 20 per cent reduction in emissions below 1990 levels by 2020. The conditional target was made in the context of successful negotiation of a comprehensive global agreement and with five specific requirements:

- the global agreement sets the world on a pathway to limit temperature rise to not more than 2 degrees Celsius
- developed countries make comparable efforts to those of New Zealand
- advanced and major emitting developing countries take action fully commensurate with their respective capabilities
- there is an effective set of rules for Land Use, Land-Use Change and Forestry (LULUCF)
- there is full recourse to a broad and efficient international carbon market. At this point these conditions have not been fully satisfied. The likelihood of all these conditions being met is dependent on the advancement of international negotiations, and New Zealand will continue to monitor the progress made on them.

Question from: Saudi Arabia at Tuesday, 30 September 2014 Category: Progress towards the achievement of its quantified economy-wide emission reduction target

**Title:** The assessment of the economic and social consequences of response measures

New Zealand's has stated that regular trade, economic and political consultations with other governments, including some non-Annex I Parties are useful for those developing Parties to underscore their concerns with regards to the impact of response measures; Are there available recommendations on these interactions that can be shared with other Parties for the benefit of encouraging similar dialogue? And how does New Zealand tap into the activities under the Conventions to address those concerns arising from the impact of the implementation of response measures?

## **Answered by:** New Zealand at Thursday, 27 November 2014

While this question is outside the scope of the multilateral assessment, further information on New Zealand's implementation of policies and measures that minimise adverse social, environmental and economic impacts on non-Annex I Parties as required under Article 3.14 of the Kyoto Protocol can be found in chapter 15 (*Information on minimisation of adverse effects*) of New Zealand's annual greenhouse gas inventory. New Zealand's latest greenhouse gas inventory can be downloaded

at: http://unfccc.int/national\_reports/annex\_i\_ghg\_inventories/national\_inventories submissions/items/8108.php

Question from: Egypt at Tuesday, 30 September 2014

Category: Progress towards the achievement of its quantified economy-wide

emission reduction target **Title:** Technology transfer

how can we build sustained technology transfer bridge to adopt MRVs system and GHG inventory between annex 1 and non annex 1 countries ?

**Answered by:** New Zealand at Thursday, 27 November 2014

While this question is outside the scope of the multilateral assessment, New Zealand's view is that greenhouse gas inventories and MRV systems are very important and will become increasingly so with the development of the new global agreement to be decided in Paris in 2015. New Zealand's view is also that the current international consultation and analysis process with biennial update reports from developing countries and the technical analysis and subsequent multilateral process should be a an important step towards this.

Further information on the technical assistance provided by New Zealand to non-Annex I countries can be found in section 7.7 of New Zealand's Sixth National Communication. In particular, section 7.7.2 provides information on technology transfer in relation to agricultural greenhouse gas emissions research, and section 7.7.3 contains information on the provision of geothermal energy training.

Question from: Egypt at Monday, 29 September 2014

**Category:** Assumptions, conditions and methodologies related to the attainment of its quantified economy-wide emission reduction target

Title: Monetoring the land use land use change and forestry

how you can monitor the land use change and forestry and how can you estimate the GHGs which are emitted or absorbed from different land type (which satellite ,software ,projection model )?

New Zealand calculates emissions for the land-use change and forestry sector according to Good Practice Guidance for Land-Use, Land-Use Change and Forestry (GPG-LULUCF, IPCC, 2003). Page 199 of New Zealand's 2011 National Inventory Report (NIR) provides an example of how the calculations are used (Ministry for the Environment, 2013).

The following section describes in more detail how New Zealand calculated the key inputs (area and emission factors) for the NIR data used for its First Biennial Report.

#### Area

New Zealand uses a mix of approaches 1 and 2 as described in GPG-LULUCF for estimating land use and land-use change.

The area of land-use change used in 2013 New Zealand's NIR (the data used for its First Biennial Report) is based on a mix of satellite imagery and data from the New Zealand Emissions Trading Scheme. New Zealand mapped land use at 1990 and 2008. The imagery for 1990 is based on Landsat 4 and Landsat 5 TM imagery. Finer resolution imagery from Landsat 7 ETM+ (available for 2000-2001), and SPOT 2 and 3 (available for 1990-1997) were used to validate the results based on the earlier, coarser imagery. The imagery for 2008 is based on SPOT 5. Where this imagery predated 2008, a combination of aerial photography, Moderate Resolution Imaging Spectroradiometer (MODIS) satellite imagery, and field verification were used to identify deforestation.

The Land-Use and Carbon Analysis System: Satellite imagery interpretation guide for land-use classes (Ministry for the Environment, 2012) contains further detail on how to interpret the satellite imagery for New Zealand conditions.

To estimate land-use change between 2008 and 2011, supplementary datasets based on statistical surveys and other available maps were needed. In New Zealand's 2012 greenhouse gas inventory, these estimates were replaced by results from the 2012 land use map that was based on SPOT 5 satellite imagery (Ministry for the Environment, 2014).

Further details on how New Zealand estimates area and area change are presented in New Zealand's 2011 NIR, section 7.2 (Ministry for the Environment, 2013, p205-224).

#### **Emission factors**

The source of the emission factors vary by land use. New Zealand has prioritised collecting information on the land uses that contain the greatest stock of carbon and therefore have the greatest influence on emissions.

Table 7.1.5 of New Zealand's 2011 NIR summarises the sources of the emission factors by pool for each land use category.

Below are further details for the land-use categories where New Zealand has moved from the tier 1 defaults to a higher tier methodology.

#### **Natural forest**

Emission factors for natural forest are based on carbon stocks calculated from field measurements taken in permanent sample plots across New Zealand. The data collected are analysed to estimate carbon stock. These analyses are based on applying allometric equations to the data collected, the details of which are included in Beets et al (2009). To calculate the annual change in carbon (i.e. the natural forest

emission factor), the difference in carbon stocks at two points in time is divided by the number of years between the two points in time.

While preliminary analyses carried out by Beets et al. (2009) found natural forests were a slight carbon sink, there were insufficient data available at that time to justify the application of an emission factor for natural forest. Therefore, carbon stock change was not reported for natural forest remaining natural forest.

#### Pre-1990 planted forest

Pre-1990 planted forest emission factors use data from LiDAR and field measurements taken in permanent sample plots across New Zealand. LiDAR is short for Light Detection and Ranging. LiDAR is a remote sensing technique that uses laser pulses and returns measured from a small aircraft along with locations based on a geographical positioning system to characterise ground and vegetation attributes. Field data is analysed using the Forest Carbon Predictor (version 3 was used for the 2011 GHG inventory), which incorporates the 300 Index Growth Model, a wood density model, a stand tending model, and the C\_Change carbon allocation model. LiDAR and field data are combined using a standard double sampling procedure. This approach reduces costs and increases the precision of the emission factor. Further information on how New Zealand uses these models is available in the 2011 NIR, section 7.3.2 (Ministry for the Environment, 2013).

Further information on the inventory design and analysis, and the individual models that make up the Forest Carbon Predictor is available in; Beets et al, 2012, Beets et al, 2011a, Kimberley et al, 2005, Beets et al, 2007a, Beets et al, 1999.

#### Post-1989 forest

Post-1989 forest emission factors use data from LiDAR measurements and field measurements taken in permanent sample plots across New Zealand between 2007 and 2008. The analysis of this data involved a double sampling approach that is described in detail in Stephens et al. (2012) and Beets et al. (2012). Field data was analysed by the Forest Carbon Predictor (version 3, described above) to produce a yield table providing a national estimate of growth in these forests. The yield table was correlated with LiDAR metrics to improve precision of the estimate over a field based sample alone. This LiDAR adjusted yield table was used for estimating the emissions (removals) for this land-use category.

Re-measurement of the post-1989 forest occurred during 2012. This information is presented in the 2012 GHG Inventory (Ministry for the Environment, 2014). Further information on the inventory design and analysis is available in Beets et al, 2011b.

## Perennial cropland

The perennial cropland emission factor is based on a study by Davis and Wakelin (2010). This looked at carbon accumulation rates (emission factors) from a range of studies for kiwifruit, grapes, pip fruit and shelterbelts. Kiwifruit, grapes and pip fruit account for 75% of the area reported as perennial cropland in New Zealand. The kiwifruit and pip fruit rates are based on New Zealand data, the rate for grapes is from a mix of New Zealand and international data, and the rate for shelterbelts, which are often associated with cropland, is from Canadian data.

#### **Grassland with woody biomass**

The grassland with woody biomass emission factor is sourced from Wakelin (2004). This is a review of New Zealand studies on the biomass volume of shrubland. The

figures were interim results. An assumption in the calculation of the carbon a volume was that the carbon content equalled 50 percent of the biomass volume (this is a common assumption used within GPG-LULUCF (IPCC, 2003)).

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Question from: China at Monday, 29 September 2014

Category: Progress towards the achievement of its quantified economy-wide

emission reduction target

Title: Projection

According to the BR and TRR, the projection of With Measure scenario for New Zealand shows that its emission in 2020 is far higher than that in the base year, indicating New Zealand can't achieve its target. Can New Zealand provide further information on this issue, and how it seeks to achieve the target?

**Answered by:** New Zealand at Thursday, 27 November 2014

As explained in Chapter 3 (*Progress in achievement of quantified economy-wide emission reduction targets and relevant information*), page 48 of its First Biennial Report, New Zealand plans to achieve its 2020 target through a combination of domestic emissions reductions, removal of carbon dioxide by forests, participation in international carbon markets and recognising surplus achieved during the first commitment period of the Kyoto Protocol. This approach is also reflected in paragraphs 14 and 15 (page 5) of the Report of the technical review of the First Biennial Report of New Zealand. Detailed information on our existing policies and measures can be found in *New Zealand's Sixth National Communication, Chapter 4, Policies and Measures* and *Annex C: Summary of Policies and Measures*.

Question from: China at Monday, 29 September 2014

Category: Progress towards the achievement of its quantified economy-wide

emission reduction target

Title: emission reduction target related to Kyotol Protocol

According to the BR, New Zealand will measure progress against its 2020 target as if it had made a commitment under the Kyoto Protocol, including participation in international carbon market. However, it seems that there is a lack of information on measuring its progress in accordance with KP requirements. Further information on this issue is needed.

**Answered by:** New Zealand at Thursday, 27 November 2014

New Zealand intends to measure progress against its 2020 target in accordance with Kyoto Protocol rules, and will report on this when the relevant data is available. A 1990 baseline will be set once the data to be reported in the 2015 National Inventory Report (NIR) is available and has been internationally reviewed. Also, reporting of New Zealand's actual emissions for the 2013-2020 period will begin with the 2015 NIR. This timing is driven by the availability of data and the review process, and is the same as for Parties with a CP2 QELRC.

## Question from: China at Monday, 29 September 2014

**Category:** Assumptions, conditions and methodologies related to the attainment of its quantified economy-wide emission reduction target

Title: carbon price

There are two carbon prices in the projection of New Zealand, one for energy and the other for forestry. Could New Zealand provide further information on this assumption?

**Answered by:** New Zealand at Thursday, 27 November 2014

Energy participants and forestry participants in the New Zealand Emissions Trading Scheme (NZ ETS) face different *effective* carbon prices. Forestry participants surrender one unit for every tonne emitted (and conversely are issued with one unit for every tonne sequestered) however energy participants surrender one unit for every two tonnes emitted. This means that an actual carbon price of \$12 (as experienced by foresters) is an effective carbon price of \$6 (as experienced by energy participants).

## Question from: China at Monday, 29 September 2014

**Category:** Assumptions, conditions and methodologies related to the attainment of its quantified economy-wide emission reduction target

Title: clarification on national target

It is not clear how New Zealand define "global agreement sets the world on a pathway to limit temperature rise to not more than 2°C". Further clarification is needed to for that.

**Answered by:** New Zealand at Thursday, 27 November 2014

The Intergovernmental Panel on Climate Change's 5th Assessment Report outlines multiple pathways that are likely to limit warming to below 2 degrees Celsius relative to pre-industrial levels. These pathways would require substantial emissions reductions globally over the next few decades and near zero emissions of CO<sub>2</sub> and other long-lived greenhouse gases by the end of the century (emissions concentrations of about 450 ppm CO<sub>2</sub> equivalent or lower in 2100). New Zealand understands that a global agreement that meets this goal will need meaningful mitigation action from all countries. In particular it will need to include ambitious quantified or quantifiable economy-wide mitigation targets from all major emitting countries. New Zealand will keenly monitor the mitigation contributions of others and their regular reporting to ensure transparency of implementation and aggregate consistency with the 2 degree goal.

Question from: European Union at Monday, 29 September 2014 Category: Progress towards the achievement of its quantified economy-wide emission reduction target

Title: Gap between target for 2020 and projected level of emissions

New Zeeland's target for 2020 is a 5% reduction based on 1990 levels. Its projected levels of emissions for 2020 as reported in the biennial report are at 29% above 1990 levels. New Zeeland did not provide any specific information in its biennial report on policies planned to achieve the target for 2020, and mentioned during the review (paragraph 19 of the technical review report of the first biennial report of New Zeeland) that it plans to achieve the target by using surplus from the 1st commitment period under the Kyoto Protocol, use of international carbon credits and contribution of removals from Art 3 para 3 and 4 activities of the Kyoto Protocol. Please explain and elaborate on how New Zeeland plans to achieve its 2020 target. Would New Zeeland implement additional policies to achieve its target for 2020?

## **Answered by:** New Zealand at Thursday, 27 November 2014

New Zealand plans to achieve its 2020 target through a combination of domestic emissions reductions, removal of carbon dioxide by forests, participation in international carbon markets and recognising surplus achieved during the first commitment period of the Kyoto Protocol.

Detailed information on our existing policies and measures can be found in *New Zealand's Sixth National Communication, Chapter 4, Policies and Measures* and *Annex C: Summary of Policies and Measures*. A copy of the report can be found on the New Zealand Ministry for the Environment website: http://mfe.govt.nz/publications/climate/nz-sixth-national-communication/index.html.

Two other policies have been announced since the release of New Zealand's Sixth National Communication:

- 1. The Government has indicated that it intends to implement a grant scheme to encourage afforestation of Kyoto compliant forests, with \$22.5 million intended to be invested over five years.
- 2. NZ\$3.8 million has been committed to programmes to improve energy and fuel efficiency in industry. These programmes include an Energy Efficient Meat and Dairy Plant Initiative; Fuel Efficient Tyres Initiative; and the expansion of the Heavy Vehicle Fuel Efficiency Programme.

Question from: European Union at Monday, 29 September 2014 Category: Progress towards the achievement of its quantified economy-wide emission reduction target

Title: Use of market mechanisms

Does New Zeeland intend to use market mechanisms to achieve the targets? If yes,

to which extent and what is the associated effect on the emission level projections for the period up to 2020? Is use of international credits foreseen and if so, to what extent?

## Answered by: New Zealand at Thursday, 27 November 2014

New Zealand intends to use market mechanisms to achieve its 2020 emission reductions target. The primary measure to reduce emissions is the New Zealand Emissions Trading Scheme (NZ ETS). The NZ ETS requires emitters to purchase and surrender emissions units in proportion to the level of their greenhouse gas emissions. It is also likely that New Zealand will use international carbon units to meet its 2020 emissions reductions target.

It is difficult to determine what contribution market mechanisms will make towards meeting the target. This is because of factors which may evolve through to 2020, such as the level of the carbon price and what rates of afforestation are achieved.

Question from: European Union at Monday, 29 September 2014

Category: Assumptions, conditions and methodologies related to the attainment of its quantified economy-wide emission reduction target

Title: Estimation of LULUCF emissions and removals

How does New Zeeland estimate its LULUCF emissions and removals in its emission levels' projections over the period? What are the methodological approaches used and how do they impact on the assessment of the progress to the QEWERT?

## **Answered by:** New Zealand at Thursday, 27 November 2014

A detailed account of the model, methods and assumptions used to project LULUCF emissions and removals out to 2030 is provided in section 5.2.6 of New Zealand's Sixth National Communication. Of note, projections of LULUCF carbon stock changes have been modelled for forest land and grassland categories only, as changes within, to and from New Zealand forests account for the majority of LULUCF emissions and removals. Carbon stock changes are modelled using a 'growth simulation' approach. The growth simulation models forest areas by age class over time. The modelling includes carbon stock changes from tree growth, harvesting, replanting, afforestation and deforestation.

Uncertainty has been included in the projections presented in the Sixth National Communication and First Biennial Report through the use of scenarios that represent low, midpoint and high emissions. The three forestry scenarios incorporate assumptions to address uncertainties relating to future rates of afforestation, deforestation, harvesting, rotation ages, carbon prices and forest management practices. The projections assumed that New Zealand's pre-1990 natural forests (around 8.1 million hectares) are in a steady state with respect to carbon dioxide emissions, that is, neither a sink nor a source. This is consistent with information reported in New Zealand's 2013 greenhouse gas Inventory submission. Subsequent

to this, and based on preliminary analysis as reported in New Zealand's 2014 greenhouse gas Inventory submission, the pre-1990 natural forest estate is reported to be a small sink of carbon.

New Zealand has taken an unconditional, economy-wide emissions reduction target under the UNFCCC to reduce net emissions over 2013–2020 to 5 per cent below 1990 by 2020, using the Kyoto Protocol framework of rules. This includes applying the Kyoto CP2 rules for forestry. As explained in New Zealand's First Biennial Report (page 42) and as reflected in the Report of the technical review of the First Biennial Report of New Zealand (paragraph 14, page 5), New Zealand will complete activity-based reporting under Article 3.3 of the Kyoto Protocol for afforestation, reforestation and deforestation, and forest management under Article 3.4 of the Kyoto Protocol.

Over the course of the first Commitment Period (CP1) of the Kyoto Protocol, New Zealand tracked its progress towards its CP1 target through a domestic report updated annually following publication of the annual greenhouse gas inventory. This report, entitled the Net Position Report, can be found at http://www.mfe.govt.nz/climate-change/reporting-greenhouse-gasemissions/nzs-net-position-under-kyoto-protocol/latest. Over the course of CP1, this annual report provided projections for CP1 broken down by sector, including for the LULUCF sector. In particular, the report provided projections of carbon dioxide equivalent gas removals and emissions from the LULUCF sector under Article 3.3 of the Kyoto Protocol (removals by post-1989 forests minus emissions deforestation of all forests). Further information on the methodologies and projections used for the Net Position report for the LULUCF sector can be found here: http://www.mfe.govt.nz/publications/climate-change/land-use-land-usechange-and-forestry-sector-greenhouse-gas-emission-0 It is likely that New Zealand will continue to publish a similar type of annual report over the course of the period 2013–2020, in order to transparently track progress against our 2020 target for domestic and international audiences.

Question from: European Union at Monday, 29 September 2014 Category: Progress towards the achievement of its quantified economy-wide emission reduction target

Title: Decoupling of economic growth from GHG emissions

To what extent is economic growth decoupled from GHG emissions?

What have been the main effects of the existing policies and measures on the emission trends? What have been the main deviations from expected results and what in your view has caused this?

**Answered by:** New Zealand at Thursday, 27 November 2014

Similarly to many other countries, New Zealand's economic growth has historically been coupled with increased gross emissions. However, we are beginning to break

this correlation, with our total greenhouse gas emissions per unit of GDP having decreased by 29.3% since 1990.

The main effects of New Zealand's existing policies and measures on emissions trends are explained in *New Zealand's Sixth National Communication*, specifically in Chapter 4.3 (*Policies and Measures, and their effects*) and Chapter 5 (*Projections and total effect of policies and measures*).

The onset of the global financial crisis had an impact on New Zealand's climate change response. In 2012 we modified the New Zealand Emissions Trading Scheme (NZ ETS), our primary policy tool for managing climate change, in order to maintain the costs that the NZ ETS places on the economy. This was to ensure that businesses and households did not face additional costs during the economic recovery. This included extending transitional measures of one-for-two surrender obligations and a \$25 price cap.

From 2012, the oversupply of international Kyoto units and consequent low carbon price reduced the expected impact of the NZ ETS on domestic emissions reductions. To address this issue, the New Zealand Government has decided that the NZ ETS will restrict participants' use of CP1 Kyoto Units for surrender to 31 May 2015 or earlier. This will effectively transition the NZ ETS into a "domestic only" scheme after this date, with only domestic New Zealand Units accepted for surrender.