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# Report of the technical review of the first biennial report of New Zealand

Developed country Parties are requested, in accordance with decision 2/CP.17, to submit their first biennial report to the secretariat by 1 January 2014. This report presents the results of the technical review of the first biennial report of New Zealand conducted by an expert review team in accordance with the "Guidelines for the technical review of information reported under the Convention related to greenhouse gas inventories, biennial reports and national communications by Parties included in Annex I to the Convention".

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# I. Introduction and summary

## A. Introduction

1. For New Zealand, the Convention entered into force on 21 March 1994. Under the Convention, New Zealand made an unconditional commitment to reduce its greenhouse gas (GHG) emissions by 5 per cent below 1990 levels by 2020 and a conditional target of between 10 and 20 per cent below 1990 levels by 2020.

2. This report covers the in-country technical review of the first biennial report (BR1) of New Zealand, coordinated by the secretariat, in accordance with the "Guidelines for the technical review of information reported under the Convention related to greenhouse gas inventories, biennial reports and national communications by Parties included in Annex I to the Convention" (decision 23/CP.19).

3. The review took place from 24 February to 1 March 2014 in Wellington, New Zealand, and was conducted by the following team of nominated experts from the UNFCCC roster of experts: Mr. Solomone Fifita (Tonga), Mr. Ioannis Sempos (Greece), Mr. Michael Strogies (Germany), and Mr. Jongikhaya Witi (South Africa). Mr. Fifita and Mr. Strogies were the lead reviewers. The review was coordinated by Ms. Barbara Muik and Mr. Daniel Hooper (secretariat).

4. During the review, the expert review team (ERT) examined each section of the BR1.

5. In accordance with decision 23/CP.19, a draft version of this report was communicated to the Government of New Zealand which provided comments that were considered and incorporated, as appropriate, into this final version of the report.

## B. Summary

6. The ERT conducted the technical review of the information reported in the BR1 of New Zealand according to the "UNFCCC biennial reporting guidelines for developed country Parties" (hereinafter referred to as the UNFCCC reporting guidelines on BRs). The ERT identified gaps and issues in reported information that are summarized in table 1.

7. During the review, New Zealand provided further relevant information (see paras. 19, 28, 32, 34, 40 and 43 below).

### 1. Completeness and transparency of reporting

Table 1
**Issues related to completeness and transparency of reported information in the first biennial report of New Zealand**

| *Sections of the biennial report* | *Completeness* | *Transparency* | *Reference to paragraphs* |
|---|---|---|---|
| Greenhouse gas emissions and trends | Complete | Transparent | |
| Assumptions, conditions and methodologies related to the attainment of the quantified economy-wide emission reduction target | Complete | Transparent | |
| Progress in achievement of targets | Mostly complete | Transparent | 21 |
| Projections | Complete | Partially | 29 |

| *Sections of the biennial report* | *Completeness* | *Transparency* | *Reference to paragraphs* |
|---|---|---|---|
| | | transparent | |
| Provision of support to developing country Parties | Complete | Partially transparent | 34, 43, 45 |

### 2. Timeliness

8. The BR1 was submitted on 13 December 2013, before the deadline of 1 January 2014 mandated by decision 2/CP.17. The common tabular format (CTF) tables were submitted on 13 December 2013. A revised version of the CTF tables was submitted on 19 December 2013. The ERT commends New Zealand for the timeliness of its submission and confirms that there have been no differences detected between the content of its BR1 and CTF tables.

### 3. Adherence to the reporting guidelines

9. The information reported by New Zealand in its BR1 is mostly in adherence to the UNFCCC reporting guidelines on BRs as per decision 2/CP.17 (see table 1 above).

# II. Technical review of the reported information

## A. All greenhouse gas emissions and removals related to the quantified economy-wide emission reduction target

10. New Zealand has provided a summary of information on GHG emission trends for the period 1990–2011. This information is consistent with the 2013 April national GHG inventory submission.

11. Total GHG emissions[1] excluding emissions and removals from land use, land-use change and forestry (LULUCF) increased by 22.1 per cent between the base year and 2011, whereas total GHG emissions, including net emissions or removals from LULUCF increased by 87.7 per cent over the same period. Carbon dioxide ($CO_2$) emissions contributed the largest proportion of New Zealand's total emissions in 2011 (45.5 per cent), followed by methane (37.1 per cent) and nitrous oxide (14.7 per cent). New Zealand has a unique emission profile compared with other Parties included in Annex I to the Convention (Annex I Parties) with agriculture contributing to 47 per cent of total emissions, which is due to the export oriented economy with its high share of agricultural exports.

12. Further information on the review of emission and emission trends is provided in chapter II.A of the report of the technical review of the sixth national communication (IDR/NC6).

## B. Assumptions, conditions and methodologies related to the attainment of the quantified economy-wide emission reduction target

13. In its BR1, New Zealand reported a description of its targets, including associated conditions and assumptions. New Zealand has announced two quantified economy-wide emissions reduction targets for 2020: an unconditional target of 5 per cent below 1990 by

[1] In this report, the term "total GHG emissions" refers to the aggregated national GHG emissions expressed in terms of carbon dioxide equivalent excluding LULUCF, unless otherwise specified.

2020, and a conditional target of between 10 and 20 per cent below 1990 levels by 2020. The unconditional target is considered by New Zealand to be equivalent to a quantified emissions limitation or reduction objective of 96.8 per cent on 1990 emissions over the period 2013–2020. The conditions of the second target, which are related to the context of a comprehensive international agreement, are the following: the global agreement sets the world on a pathway to limit temperature rise to not more than 2°C; 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 LULUCF; and there is full recourse to a broad and efficient international carbon market.

14. The base year for both targets is 1990 for all gases. The targets cover all sectors (i.e. energy, transport, industrial processes, agriculture, LULUCF and waste), and the global warming potential (GWP) reference is the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report (AR4).[2] New Zealand's intention is to apply the Kyoto Protocol's second commitment period accounting rules to its unconditional 2020 target, including those agreed in Durban, South Africa, in 2011 for the land sector. However, New Zealand reported in its BR1 that some technical changes to the accounting rules may be required to reflect the status of its target, and therefore, it reserves the right to review the accounting rules it applies in order to ensure alignment with the Kyoto Protocol rules and to support a smooth transition to a post-2020 regime. For 2013–2020, New Zealand will calculate the contribution of LULUCF using the activity-based approach using Kyoto Protocol rules for activities under Article 3, paragraph 3, of the Kyoto Protocol (afforestation, reforestation and deforestation), and under Article 3, paragraph 4 (forest management).

15. New Zealand also reported in its BR1 that it will measure progress against its 2020 target as if it had made a commitment under the Kyoto Protocol, including participation in international carbon markets, accounting for removals/emissions from Article 3, paragraphs 3 and 4, (forest management) activities, and recognizing any surplus achieved during the first commitment period of the Kyoto Protocol.

## C. Progress made towards the achievement of the quantified economy-wide emission reduction target

16. In its BR1, New Zealand reported information on its mitigation actions implemented since its NC5 to achieve its target. New Zealand also reported on the use of units from market-based mechanisms and LULUCF to achieve its targets.

17. New Zealand further reported the mitigation impact of most actions of CTF table 3 as not estimated ("NE"). The ERT strongly encourages the Party to explore bottom-up as well as top-down modelling approaches to better address the quantification of the impact of mitigation actions.

18. The ERT reviewed the reported information and provided its assessment of progress made towards achieving the target. New Zealand has implemented policies and measures (PaMs) that target all relevant sectors and GHG. The PaM with the most significant mitigation impact is the New Zealand Emissions Trading Scheme (NZ ETS), which is a cross-cutting measure covering the following sectors: forestry, transport fuels, stationary

[2] The quantified economy-wide emission reduction target by New Zealand is expressed using the GWP values from the AR4, while emission levels are assessed using the values from the Intergovernmental Panel on Climate Change Second Assessment Report, as per the "Guidelines for the preparation of national communications by Parties included in Annex I to the Convention. Part I: UNFCCC reporting guidelines on annual greenhouse gas inventories".

energy, industrial processes, fluorinated gases, agriculture and waste. Currently, agriculture has reporting obligations, while the other sectors have both reporting and surrender obligations. Concerning the progress made by New Zealand in achieving its economy-wide emission reduction target, the ERT noted that the total GHG emissions (without LULUCF) in 2011 have increased by 22.1 per cent compared with 1990 levels. However, the estimated removals in 2011 from afforestation, reforestation and deforestation (activities under Article 3, paragraph 3, of the Kyoto Protocol) are expected to offset 23.14 per cent of the total GHG emissions (without LULUCF).

19. According to current projections, the total GHG emissions (without LULUCF) of New Zealand are expected to rise to 29 per cent above 1990 levels (or 6 per cent above 2011 levels). However, the ERT noted that the unconditional target put forward by New Zealand is 5 per cent below 1990 levels by 2020. During the review, the Party explained that the difference between the projected emissions for 2020 and the unconditional target is planned to be covered by the use of international carbon credits, the surplus from the first commitment period to the Kyoto Protocol and the contribution of removals from the Article 3, paragraphs 3 and 4, activities of the Kyoto Protocol.

### 1. Mitigation actions and their effects

20. New Zealand has provided in its BR1 comprehensive and well-organized information on its package of mitigation actions implemented to achieve its target. The BR1 provided information on mitigation actions organized by sector and by gas. A detailed review of the reported information is provided in chapter II.B of the IDR/NC6.

21. However, the BR1 does not include all of the mandatory information required by the guidelines. The ERT noted that the Party did not report on the mitigation actions that are planned in order to achieve the conditional target for 2020. The ERT recommends that New Zealand report on the planned mitigation actions with respect to its conditional target under the Convention, along with the related information required in CTF table 3 in its next BR.

22. Although the NC6 includes a chapter on monitoring, evaluation and review, which describes the review of the NZ ETS, forestry schemes and the Waste Minimisation Act 2008, New Zealand does not report on how the progress with PaMs is monitored and evaluated over time, neither does the Party report a quantitative estimate of the impacts of most individual PaMs. The GHG emission reduction potential is provided in the BR1 for a very limited number of PaMs, some of them are presented at an aggregated level. For example, the estimated GHG emission reduction potential of New Zealand's ETS is 9,810 kt $CO_2$ eq by 2020, while the estimated GHG emission reduction potential of the Efficient Products Programme is 1,400 kt $CO_2$ eq by 2020. The assumed effect of the NZ ETS does also include other unspecified effects of other described PaMs.

23. The ERT considers that New Zealand would benefit from estimating the effects of its PaMs as this would increase the understanding of its climate change policy, improve public awareness on the actions taken (and planned), provide for justification on budgets allocated to specific PaMs, and consequently lead to a broader acceptance and support by all stakeholders. Also, the estimation of the effect of PaMs would allow for the periodic assessment of existing PaMs and the identification of the possible need for additional PaMs. Thus, the ERT strongly encourages New Zealand to report quantitative estimates of the impacts of its individual PaMs to improve the completeness of reporting and the consistency between the PaMs and projections chapters. The ERT also encourages the Party to improve the completeness of its reporting by providing a description of the way in which progress with PaMs is monitored and evaluated over time and of the institutional arrangements for the monitoring of GHG mitigation policy.

24. New Zealand considers its ETS as the principal policy instrument in its climate change programme for the period 2008–2020. The NZ ETS was launched in 2008. Forestry was the first sector covered by the NZ ETS in 2008, followed by fossil fuel use in stationary energy sources, transport and the manufacturing industry sector. In 2013, the use of synthetic gases and the waste sector were incorporated into the NZ ETS and decisions for the obligatory inclusion of agriculture were taken. The agriculture sector has been required to report agricultural emissions under the NZ ETS since 2012. The inclusion of surrender obligations for agriculture within the NZ ETS depends on the availability of economically viable and practical technologies to reduce emissions from agriculture; therefore the start date for the inclusion of surrender obligations for agriculture has been put on hold, which creates uncertainties in relation to the delivery of its estimated emission reductions. In addition, extended transitional measures to reduce cost impacts by the NZ ETS have been implemented (two-for-one surrender obligation and the fixed price option: a possibility to meet the obligation by paying a fixed price of 25 New Zealand dollars (NZD) per tonne of emission). The next review of the NZ ETS to include additional sectors is in 2015.

25. Other key PaMs include market incentives and the regulatory framework to achieve the target of 90 per cent of electricity generated from renewable energy resources by 2025 and research and technology development in the agriculture sector, energy efficiency initiatives in residential and commercial buildings, and transport sector initiatives. Table 2 provides a concise summary of the key mitigation actions implemented by New Zealand to achieve its target.

Table 2
**Summary of information on mitigation actions reported by New Zealand**

| *Sectors affected* | *List of key mitigation actions* | *Estimate of mitigation impact (kt $CO_2$ eq)* |
|---|---|---|
| Policy framework and cross-sectoral measures | | |
| | New Zealand Emissions Trading Scheme | 9 810 |
| Energy | | |
| Energy efficiency | Energy efficiency in government | NE |
| Residential and commercial - | ENERGYWISE homes | 20 |
| sectors | Efficient Products Programme | 1 400 |
| | Business programmes | 89 |
| Transport | Vehicle fuel economy labelling | 43 |
| | Biofuels | NE |
| | Electric vehicles | NE |
| | Other transport measures | NE |
| Industrial sectors | | |
| Agriculture | Global Research Alliance on agricultural greenhouse gases | NE |
| | Primary Growth Partnership | NE |
| | New Zealand Agricultural Greenhouse Gas Research Centre | NE |
| | Pastoral Greenhouse Gas Research Consortium | NE |
| | Sustainable Land Management and Climate Change Plan of Action | NE |

| *Sectors affected* | *List of key mitigation actions* | *Estimate of mitigation impact (kt $CO_2$ eq)* |
|---|---|---|
| Forestry | Permanent Forest Sink initiative | NE |
| | East Coast Forestry Project | NE |
| | Afforestation Grants Scheme | NE |
| Waste management | National Environmental Standard for Landfill Methane | NE |
| | Waste Minimisation Fund | NE |

*Note*: The *greenhouse* gas reduction estimates, given for some measures are reductions in kt $CO_2$ or $CO_2$ eq for 2020.

*Abbreviation*: NE = not estimated.

26. New Zealand provided information on changes in its domestic institutional arrangements, including institutional, legal, administrative and procedural arrangements used for domestic compliance, monitoring, reporting, archiving of information and evaluation of the progress towards its target. The ERT took note of the review of the changes to the national system as reflected in the report of the individual review of GHG inventory of New Zealand submitted in 2013. In particular, the inclusion of a national quality assurance/quality control (QA/QC) manager and coordinator to coordinate QA/QC activities in the New Zealand national system. The ERT commends New Zealand for this development and encourages the Party to continue exploring ways and means of improving its national system.

27. New Zealand provided, to the extent possible, detailed information on the assessment of the economic and social consequences of response measures in its BR1. Further information is provided in the 2013 national inventory report. During the review, New Zealand provided the ERT with additional information on how it strives to implement its commitments under Article 3, paragraph 1, of the Kyoto Protocol in such a way as to minimize adverse social, environmental and economic impacts on developing country Parties, particularly those identified in Article 4, paragraphs 8 and 9, of the Convention (see IDR.6). The ERT considers the reported information to be transparent and complete. The ERT commends New Zealand for the additional information provided and encourages the Party to continue exploring and reporting on the adverse impacts of the response measures.

### 2. Estimates of emission reductions and removals and the use of units from the market-based mechanisms and land use, land-use change and forestry

28. New Zealand reported on emissions and removals from LULUCF in relation to activities under Article 3, paragraph 3, of the Kyoto Protocol for the years 2008–2011. Activities under Article 3, paragraph 4, were reported as "not applicable", because they were not elected for accounting under the first commitment period to the Kyoto Protocol. However, New Zealand will account for forest management under Article 3, paragraph 4, for its 2013–2020 targets. In the BR1, the use of market-based mechanisms under the Convention for the reported years 2011–2012 was reported to be zero. The Party also reported that it has not transferred any international units to the retirement account of the national registry to fulfil its emissions target for the first commitment period of the Kyoto Protocol. During the review, New Zealand explained that the contribution of activities under Article 3, paragraph 3, of the Kyoto Protocol is estimated to offset about 77.2 Mt $CO_2$ eq of emissions during the first commitment period (or mean annual removals of 15.4 Mt $CO_2$ eq for the period 2008–2012), and that the international carbon credits (emission reductions , emission reduction units and removal units) surrendered via the NZ ETS are currently approximately equivalent to 60 Mt $CO_2$ eq in the government

account. Table 3 illustrates how New Zealand reported on the use of units from market-based mechanisms and LULUCF to achieve its target.

Table 3
**Summary information on the use of units from market-based mechanisms and land use, land-use change and forestry as part of the reporting on the progress made towards achievement of the target by New Zealand**

| *Year* | *Emissions excluding LULUCF (kt $CO_2$ eq)* | *LULUCF emissions/removals (kt $CO_2$ eq)* | *Emissions including LULUCF (kt $CO_2$ eq)* | *Use of units from market-based mechanisms (kt $CO_2$ eq)* |
|---|---|---|---|---|
| Base year (1990) | 59 643.06 | NA | 59 643.06 | NA |
| 2010 | 71 847.77 | –17 426.50 | 54 421.27 | 0.00 |
| 2011 | 72 834.93 | –16 876.91 | 55 958.02 | 0.00 |

*Abbreviations*: LULUCF = land use, land-use change and forestry, NA = not applicable.

## 3. Projections

29. New Zealand has provided in its BR1 comprehensive and well-organized information on its updated projections for 2020 and 2030. A detailed review of the reported information is provided in chapter II.C of the IDR/NC6. The key recommendations are that New Zealand improve the transparency of its reporting by including in the next BR a complete list of which individual PaMs reported are included in the 'with measures' projections and by providing all factors and activities underlying the projections, especially for road transport and agriculture.

30. New Zealand provided information on the changes since the previous NC in the methodologies used for the preparation of projections. The approach, assumptions and institutional arrangements in place to prepare GHG emission projections are consistent with those used in the NC5. The main changes between its BR1 and NC5 resulted from the lower carbon price and population growth, the higher international crude oil prices, and emissions from fluorinated gases assumed in the BR1. The changes in the agriculture emissions were influenced by the recent droughts over 2007–2008 and 2010, and by numerous improvements in New Zealand's annual GHG inventories that related to improvement of activity data, and its country-specific model and emission factors (EFs). The LULUCF projections were changed due to significant improvement of activity data and EFs since 2009. The calculation of projected emissions from waste has also been improved, especially the emissions from solid waste disposal sites and industrial wastewater treatment.

31. The ERT noted information reported by New Zealand on projected emission trends by 2020. According to the reported information, the projected emission trends without LULUCF are 29.2 per cent above the base year by 2020, while the target is 5.0 per cent below the base year. According to the information reported in its BR1 and NC6, the ERT cannot assess the contribution of the activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol towards meeting the 2020 unconditional target and/or its equivalent quantified emission limitation and reduction objective (QELRO) of 96.8 per cent on 1990 emissions over the period 2013–2020, for the reasons explained in the IDR of its NC6.

32. During the review, the Party provided a detailed analysis related to achieving its unconditional target. According to this analysis, New Zealand expects to meet its unconditional target. The surplus from the first commitment period to the Kyoto Protocol and the Article 3, paragraphs 3 and 4, activities are estimated to contribute to 15 per cent

and 17 per cent, respectively, to the accomplishment of this target. The ERT commends the Party for this detailed analysis and encourages New Zealand to include it in its next submission along with a more detailed presentation of the projections of forestry sector (e.g. emissions breakdown by different activities).

33. In its BR1, New Zealand did not provide a projections scenario indicating the pathway to achieve its conditional 2020 target under the Convention and the longer-term 2050 target, which should be directly linked with a set of additional planned mitigation actions. The ERT encourages the Party to report in its next BR a 'with additional measures' scenario, which will indicate the trajectory of emissions, along with information about key factors and activities, for meeting these targets.

## D. Provision of financial, technological and capacity-building support to developing country Parties relevant for Annex II Parties

### 1. Provision of financial support to developing country Parties

34. In its BR1, New Zealand reported information on the provision of financial, technological and capacity-building support required under the Convention. However, it did not provide details on what 'new and additional' financial resources it has provided and did not clarify how these resources are 'new and additional'. Even though the report has a section 'new and additional', the information provided in it is insufficient to clarify why the resources are new and additional. During the review, New Zealand provided additional information explaining that the reporting period includes the 2010–2012 fast-start finance period, and so New Zealand reported significant increases in bilateral assistance for climate outcomes delivered as a contribution to its fast-start finance commitment.

35. In the absence of an internationally agreed definition of what can be counted as 'new and additional', New Zealand's practical approach has been to report all climate-related assistance for that period, noting that climate-related finance accounted for a growing proportion of expenditure within official development assistance (ODA), which also increased over the previous three years. New Zealand believes that this is the most transparent and appropriate way of communicating new resources committed because, in the absence of an agreed definition, any answer as to which resources reported in New Zealand's BR1 are 'new and additional' would vary widely depending upon which approach was taken. The ERT recommends that New Zealand, in its next NC, elaborate further on how it has determined the reported resources as being 'new and additional', to increase transparency.

36. New Zealand reported on its public financial support by allocation channels for 2011 and 2012, totalling NZD 152.36 million or USD 121.89 million. For the reporting period, 52 per cent of its assistance was delivered through bilateral, regional and other channels; 33 per cent was through multilateral financial institutions, including regional development banks; 11 per cent was through specialized United Nations bodies; while 4 per cent was delivered through multilateral climate change funds. Of the total funds provided, 48 per cent was for core/general activities, while 25 per cent was for mitigation compared with 11 per cent for adaptation and 16 per cent for category others.

37. Over the reporting period 2011–2012, NZD 72.82 million or USD 58.09 million was delivered through multilateral channels of which 69 per cent was through multilateral financial institutions, including regional development banks; 23 per cent through specialized United Nations bodies; and 8 per cent through multilateral climate change funds. The contribution through bilateral, regional and other channels was a total of NZD 79.54 million or USD 63.78 million.

38. The ERT commends New Zealand for the information reported and encourages the Party to describe the data, in addition to completing the tables, in a more comprehensive manner by way of shares, trends and growths.

39. The BR1 does include some information required by the guidelines on distinguishing activities that are to be undertaken by the public and private sectors. It also includes information on capacity-building support that responds to the existing and emerging capacity-building needs identified by Parties not included in Annex I to the Convention (non-Annex I Parties) in the areas of mitigation, adaptation, and technology development and transfer.

40. During the review, New Zealand provided additional information, elaborating on how it seeks to ensure that the resources it provides effectively address the needs of non-Annex I Parties with regard to climate change adaptation and mitigation. New Zealand has adopted a Climate Change Operational Policy, which details the New Zealand Aid Programme's operational policy on delivering support for addressing climate change and describes how that support is to be recorded and quantified. It is designed to help staff meet the Government of New Zealand's commitment to deliver and track climate change related ODA. New Zealand has also adopted an Environmental and Social Impacts Operational Policy, which sets out a process for assessing and managing potentially adverse environmental and social impacts associated with New Zealand Aid Programme activities.

41. New Zealand described, in CTF table 9 of the BR1, how its resources address the adaptation and mitigation needs of non-Annex I Parties. It also presented its mitigation and adaptation activities by allocation channels in CTF table 7 of the BR1, by multilateral channels in CTF table 7(a), and by bilateral and regional channels in CTF table 7(b). These include water and sanitation projects in Kiribati to provide better access to safe drinking water on South Tarawa and Kiritimati Island through the installation of rainwater capture and storage systems on large public buildings; support for the cyclone recovery and rehabilitation plan for the Cook Islands; and assistance to improve education quality by the installation of solar power in rural primary schools and early childhood education centres on the Solomon Islands. Table 4 includes some of the information reported by New Zealand on its provision of financial support.

Table 4
**Summary of information on provision of financial support in 2011–2012**
(Million United States dollars)

| | *Years of disbursement* | |
|---|---|---|
| *Allocation channel of public financial support* | *2011* | *2012* |
| Multilateral financial institutions, including regional development banks: | 24.65 | 15.42 |
| Contributions through United Nations bodies | 6.54 | 6.74 |
| Multilateral climate change funds | 2.59 | 2.17 |
| Climate-specific contributions through bilateral, regional and other channels | 26.62 | 37.16 |

## 2. Approach used to track support provided

42. New Zealand continued to focus its climate change support on the Pacific Island Countries (PICs). PICs and Pacific regional organizations accounted for 43 per cent and 35 per cent of New Zealand's assistance through bilateral, regional and other channels for 2011 and 2012, respectively. While there was a decrease in the percentage share, it was an

8 per cent increase in absolute terms. For the total of the reporting period, assistance to PICs accounted for 39 per cent of totals.

43. To assist in the tracking of support provided, the New Zealand Aid Programme has systems in place to track, measure and record climate change-related assistance provided to developing countries. The Climate Change Operational Policy describes how support for climate change is to be delivered, recorded and quantified. The Environmental and Social Impacts Operational Policy sets out a process for assessing and managing potentially adverse environmental and social impacts associated with New Zealand's Aid Programme activities. During the review, New Zealand provided additional information elaborating on these policies. The ERT noted that although the Party mentions these policies in its BR1, it does not elaborate on its national approach for tracking the provision of financial, technological and capacity-building support to non-Annex I Parties, nor does it describe the methodology used for reporting information on finance. Therefore, the ERT recommends that New Zealand, in its next BR, include an elaboration on its tracking approach and a description of the methodologies used to increase transparency.

44. With regard to the most recent financial contributions to enhance the implementation of the Convention by developing countries as part of its fast-start funding, New Zealand provided NZD 90.34 million in grant funding through a range of bilateral, regional and multilateral contributions over the fast-start period and has confirmed that a post fast-start finance contribution will continue at a similar level, with the focus remaining on renewable energy and climate resilience in the Pacific.

### 3. Technology development and transfer

45. In its BR1, New Zealand has provided information on activities related to the transfer of technology to developing countries, including information on the public and private sectors. CTF table 8 of its BR1 provides information on the recipient country and/or region; the target area in terms of mitigation, adaptation or both; the sector; the source of the funding for the technology transfer; whether the activities are undertaken by the public or private sectors, or both; and the status of the implementation. However, the Party did not include a textual description on measures taken to promote, facilitate and finance the transfer of, access to and deployment of climate-friendly technologies for the benefit of non-Annex I Parties, and for the support of the development and enhancement of the endogenous capacities and technologies of non-Annex I Parties. The ERT, therefore, recommends that New Zealand includes such a textual description in its next BR to increase transparency. New Zealand also did not provide information on success and failure stories and the ERT encourages the Party to do so in its next BR.

46. New Zealand's contributions are not monitored at a level that differentiates between the provision of technology development and transfer support, and capacity-building support. For instance, in CTF table 9 of its BR1, capacity-building support is reported in programmes or projects, which also include technology transfer. Most of technology development and transfer support are for PICs and are both in the areas of mitigation and adaptation. The mitigation activities are mostly in the energy sector, while the adaptation activities are in other vulnerability assessment and cross-cutting areas. All activities are publicly funded, most are undertaken by public institutions and all are currently under implementation.

### 4. Capacity-building

47. In its BR1, New Zealand has not provided a textual description of how it has provided capacity-building support for mitigation, adaptation and technology. New Zealand reported that its contributions are not monitored at a level that differentiates between the provision of 'technology development and transfer support' and 'capacity-building

support'. However, New Zealand filled in CTF table 9 of its BR1 and the ERT noted that in tables 7.3–7.6 of its NC6, the Party was able to separate out its capacity-building support. Of the 70 described programmes or projects, 37 target adaptation, 28 mitigation and five multiple areas. Most of New Zealand's capacity-building support is provided to PICs. The ERT encourages the Party to briefly describe, in its next BR, the process of identifying its bilateral activities with non-Annex I Parties and how those identified activities reflect their priority in capacity-building needs.

# III. Conclusions

48. The ERT noted the information reported in the BR1 of New Zealand in accordance with the UNFCCC reporting guidelines on BRs. The ERT concludes that the BR1 provides a good overview of information on emissions and removals related to the quantified economy-wide emission reduction target, a description of the target, progress made by New Zealand to achieve its target, and provision of support to developing country Parties. During the review, New Zealand provided additional information on the progress made in achieving its targets, projections and provision of support to developing country Parties.

49. New Zealand's emissions in 2011 were estimated to be 22.1 per cent above its 1990 level excluding LULUCF and 87.7 per cent above including LULUCF. Emission increases were driven by strong economic and population growth and resulting demand in transport leading to an increase in the number of cars and their related emissions, and an increase in the number of animals and the productivity in the agriculture sector. These factors outweighed improvements in the efficiency of energy use in the residential and industrial sectors and in waste management and resulting emission reductions. New Zealand has a unique emission profile compared with other Annex I Parties with agriculture comprising 47 per cent of total emissions, which is due to the export oriented economy with its high share of agricultural exports.

50. New Zealand reported two quantified economy-wide emissions reduction targets for 2020: an unconditional target of 5 per cent below 1990 by 2020, and a conditional target of between 10 and 20 per cent below 1990 levels by 2020. The targets cover all sectors and the GWP reference is AR4. The unconditional target is considered by New Zealand to be equivalent to a QELRO of 96.8 per cent on 1990 emissions over the period 2013–2020. New Zealand's intention is to apply the Kyoto Protocol's second commitment period rules to account for its unconditional 2020 target, including by completing activity-based reporting under Article 3, paragraph 3, of the Kyoto Protocol for afforestation, reforestation and deforestation, and forest management under Article 3, paragraph 4.

51. Concerning the progress made by New Zealand in achieving its economy-wide emission reduction target under the Convention, the ERT noted that the total GHG emissions (without LULUCF) in 2011 have increased by 22.06 per cent compared with 1990 levels. However, the estimated removals in 2011 from afforestation, reforestation and deforestation (activities under Article 3, paragraph 3, of the Kyoto Protocol) are expected to offset 23.14 per cent of the total GHG emissions (without LULUCF). According to the reported information, the projected emission trends without LULUCF are 29.2 per cent above the base year by 2020, while the unconditional target is 5.0 per cent below the base year.

52. According to an analysis presented during the review, New Zealand expects to meet its unconditional target. This is envisaged to be accounted using the Kyoto Protocol's second commitment period framework of rules, including making use of the surplus from the first commitment period and accounting of Article 3, paragraphs 3 and 4, of the Kyoto Protocol activities. Regarding the conditional medium-term target of a 10 to 20 per cent

emission reduction below 1990 by 2020 and the long-term target of a 50 per cent emission reduction below 1990 levels by 2050, New Zealand did not present additional PaMs indicating how these targets could be met.

53. The GHG emission projections provided by New Zealand in its BR1 include a 'with measures' scenario and a 'without measures' scenario. Projections are discussed on a sectoral basis. Projections are produced by a cross-government technical group led by the Ministry for the Environment, which ensures the high quality of projection scenarios and ongoing improvements.

54. New Zealand has implemented PaMs that target all relevant sectors and GHGs. The PaM with the most significant mitigation impact is the NZ ETS, which is a cross-cutting measure covering the following sectors: forestry, transport fuels, stationary energy, industrial processes, fluorinated gases, agriculture and waste. Currently, agriculture has reporting obligations only, while the other sectors have both reporting and surrender obligations.

55. New Zealand continues to increase its financial contribution to climate change. It has increased its contribution by 32 per cent between its NC5 and its BR1, the most notable change being in its bilateral assistance. New Zealand's public financial support for 2011 and 2012 totalled USD 121.89 million of which half was delivered through bilateral, regional and other channels. Priority countries in New Zealand's bilateral assistance focus mostly on the Pacific islands but also include South-East Asia, South America and South-West Asia.

56. In the course of the review, the ERT formulated several recommendations relating to the completeness and transparency of New Zealand's reporting under the Convention. The key recommendations[3] are that New Zealand:

(a) Improve the completeness of reporting by including in the next biennial report the information on mitigation actions, including the PaMs, that are planned to be implemented (currently New Zealand reports only on implemented PaMs);

(b) Improve the transparency of reporting by including in the next biennial report the following information:

(i) An indication of which individual PaMs reported in the PaMs section of the NC are included in the 'with measures' projections;

(ii) All factors and activities underlying the projections, especially for road transport and agriculture;

(iii) A further clarification on how it has determined the reported financial resources as being 'new and additional';

(iv) A further elaboration on its national approach for tracking the provision of financial, technological and capacity-building support to non-Annex I Parties and a description of the methodology used for reporting information on finance;

(v) A textual description of measures taken to promote, facilitate and finance the transfer of, access to and deployment of climate-friendly technologies for the benefit of non-Annex I Parties; and for support of the development and enhancement of the endogenous capacities and technologies of non-Annex I Parties.

[3] The recommendations are given in full in the relevant sections of this report.

# Annex

## Documents and information used during the review

### A. Reference documents

"UNFCCC biennial reporting guidelines for developed country Parties". Annex to decision 2/CP.17.
Available at <http://unfccc.int/resource/docs/2011/cop17/eng/09a01.pdf#page=4>.

"Guidelines for the technical review of information reported under the Convention related to greenhouse gas inventories, biennial reports and national communications by Parties included in Annex I to the Convention". Annex to decision 23/CP.19. Available at <http://unfccc.int/resource/docs/2013/cop19/eng/10a02.pdf#page=20>.

FCCC/ARR/2013/NZL. Report of the individual review of the annual submission of New Zealand submitted in 2013. Available at <http://unfccc.int/resource/docs/2014/arr/nzl.pdf>.

FCCC/IDR.5/NZL. Report of the in-depth review of the fifth national communication of New Zealand. Available at <http://unfccc.int/resource/docs/2011/idr/nzl05.pdf>.

Sixth national communication of New Zealand. Available at <http://unfccc.int/files/national_reports/annex_i_natcom/submitted_natcom/application/pdf/sixth-national-communication_20131220[1].pdf>.

First biennial report and BR CTF of New Zealand. Available at <http://unfccc.int/files/national_reports/biennial_reports_and_iar/submitted_biennial_reports/application/pdf/br1_nzl_2014.pdf > and <http://unfccc.int/files/national_reports/biennial_reports_and_iar/submitted_biennial_reports/application/pdf/nzl_2014_v4.0_posted.pdf>.

2013 GHG inventory submission of New Zealand. Available at <http://unfccc.int/files/national_reports/annex_i_ghg_inventories/national_inventories_submissions/application/zip/nzl-2013-nir-12apr.zip >.

### B. Additional information provided by the Party

Responses to questions during the review were received from Mr. Dylan Muggeridge (Ministry for the Environment), including additional material on updated policies and measures, greenhouse gas projections and recent climate policy developments in New Zealand. The following documents[1] were also provided by New Zealand:

Dake CKG. 2011. *The Econometrics of New Zealand Pastoral Agriculture: With Special Reference to Greenhouse Gas Emissions*. MAF Technical Paper No: 2011/38. Ministry of Agriculture and Forestry.

DM Practice & Process. 2013. *Activity Quality Policy*. New Zealand Aid Programme. Available at <http://www.aid.govt.nz/>.

Forbes R., Gardiner P. 2004. *Projecting Livestock Numbers*. New Zealand Agricultural and Resource Economics Society (Inc.).

[1] Reproduced as received from the Party.

Government of Tokelau, New Zealand foreign affairs and trade aid programme. 2013. *Tokelau Renewable Energy Project, Case Study*. New Zealand Aid Programme. Available at <http://www.aid.govt.nz/>.

New Zealand foreign affairs and trade aid programme. 2012. *New Zealand Aid Programme Sector Priorities 2012-15*. New Zealand Ministry of Foreign Affairs and Trade. Available at <http://www.aid.govt.nz/>.

PDM Environment and Climate Change. 2012. *Environmental and Social Impacts Guideline*. New Zealand Aid Programme. Available at <http://www.aid.govt.nz/>.