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## Report of the technical review of the first biennial report of Finland

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 Finland 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 Finland, the Convention entered into force on 1 August 1994. Under the Convention, Finland made a commitment to contribute to the European Union (EU) quantified economy-wide emission reduction target jointly with all EU member States to reduce the greenhouse gas (GHG) emissions of the EU by 20 per cent by 2020 below the 1990 level.<sup>1</sup>

2. Under the EU climate and energy package, this target will be met by the EU and its member States through a 21 per cent reduction from 2005 in the GHG emissions from installations under the EU Emissions Trading System (EU ETS) and a 10 per cent reduction in the GHG emissions from 2005 in the non-EU ETS sectors (primarily transport, some industrial processes, agriculture and waste). According to the EU effort-sharing of the non-EU ETS target, Finland is to reduce its GHG emissions outside the EU ETS by 16 per cent between 2005 and 2020.

3. This report covers the in-country technical review of the first biennial report (BR1)<sup>2</sup> of Finland, 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).

4. The review took place from 7 to 12 April 2014 in Helsinki, Finland, and was conducted by the following team of nominated experts from the UNFCCC roster of experts: Mr. Constantin Harjeu (Romania), Mr. Eric Mugurusi (United Republic of Tanzania), Mr. Viswa Bandu Pant (India), and Mr. Davor Vesligaj (Croatia). Mr. Pant and Mr. Vesligaj were the lead reviewers. The review was coordinated by Ms. Xuehong Wang (secretariat).

5. During the review, the expert review team (ERT) reviewed each section of the BR1.

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

### B. Summary

7. The ERT conducted a technical review of the information reported in the BR1 of Finland according to the “UNFCCC biennial reporting guidelines for developed country Parties” (hereinafter referred to as the UNFCCC reporting guidelines on BRs).

8. During the review, Finland provided further relevant information on financial support it has committed and/or pledged, assumptions used to produce information on finance, and its support for the development and enhancement of the endogenous capacities and technologies of developing countries.

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<sup>1</sup> FCCC/SB/2011/INF.1/Rev.1 and FCCC/AWGLCA/2012/MISC.1.

<sup>2</sup> The biennial report submission comprises the text of the report and the common tabular format (CTF) tables. Both the text and the CTF tables have been subject to the technical review.

## 1. Completeness and transparency of reporting

9. Gaps and issues related to the reported information identified by the ERT are presented in table 1 below.

## 2. Timeliness

10. The BR1 was submitted on 30 December 2013, before the deadline of 1 January 2014 mandated by decision 2/CP.17. The common tabular format (CTF) tables were also submitted on 30 December 2013.

## 3. Adherence to the reporting guidelines

11. The information reported by Finland in its BR1 is mostly in adherence with the UNFCCC reporting guidelines on BRs as per decision 2/CP.17 (see table 1).

Table 1

### Summary of completeness and transparency issues of reported information in the first biennial report of Finland<sup>a</sup>

<i>Sections of the biennial report</i>	<i>Completeness</i>	<i>Transparency</i>	<i>Reference to paragraphs</i>
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	Complete	Transparent	
Projections	Complete	Transparent	
Provision of support to developing country Parties	Complete	Mostly transparent	44, 45

<sup>a</sup> A list of recommendations pertaining to the completeness and transparency issues identified in this table is included in chapter III below (conclusions).

## II. Technical review of the reported information

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

12. Finland has provided a summary of information on GHG emission trends for the period 1990–2011 in its BR1 and CTF table 1. This information is consistent with the 2013 national GHG inventory submission. During the review, the ERT took note of the most recent 2014 GHG inventory data that Finland submitted to the secretariat on 15 April 2014.

13. Total GHG emissions<sup>3</sup> excluding emissions and removals from land use, land-use change and forestry (LULUCF) decreased by 4.9 per cent between 1990 and 2011, whereas total GHG emissions including net emissions or removals from LULUCF decreased by 23.2 per cent over the same period. Emission decreases were driven mainly by severe economic recession in the period 2008–2009 and also by the changes in energy supply structure with increased share of renewable energy sources, a decline in the livestock

<sup>3</sup> In this report, the term “total GHG emissions” refers to the aggregated national GHG emissions expressed in terms of carbon dioxide equivalent excluding land use, land-use change and forestry, unless otherwise specified.

population and nitrogen fertilization, improvements in waste treatment and the implementation of nitrous oxide (N<sub>2</sub>O)-abatement technologies in the industrial processes sector. Further information on the review of emissions 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**

14. In its BR1 and CTF table 2, Finland reported a description of its target, including associated conditions and assumptions. Finland's quantified economy-wide emission reduction target for the period 2013–2020 is a 20 per cent reduction in comparison with the 1990 level and will be fulfilled jointly with the European Union and its member States as stipulated by the EU climate and energy package adopted in 2009. The base year for the target is 1990 for carbon dioxide (CO<sub>2</sub>), methane and N<sub>2</sub>O and 1995 for hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride. The base year for nitrogen trifluoride will be determined later on. Sectors covered by the target include energy, transport, industrial processes, solvent and other product use, agriculture and waste.

15. The LULUCF sector is not included under the European Union quantified economy-wide emission reduction target. The global warming potential (GWP) values used for GHG emission projections are from the Second Assessment Report of the Intergovernmental Panel on Climate Change.<sup>4</sup> The use of market-based mechanisms under the Convention was reported as not estimated ("NE") in CTF table 2(e) since Finland has not yet decided on their use, taking into account the assumption that Finland will achieve its reduction target in the non-EU ETS sector without these supplemental mechanisms.

16. The ERT noted that the cells of CTF table 4 contained only "NA" (not applicable) and "NE" (not estimated) owing to the fact that Finland's target is a part of the joint European Union target of a 20 per cent reduction in comparison with the 1990 level in the period 2013–2020. Furthermore, the LULUCF sector is excluded from emission reduction target and a decision on use of market-based mechanisms has not been made. Finland's target for the non-EU ETS sector is to reduce emissions by 16 per cent in 2020 in comparison with the 2005 level.

17. The ERT concludes that the information on assumptions, conditions and methodologies relates to the attainment of the reduction target in the BR1 and that the CTF is complete and transparent.

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

18. In its BR1 and CTF tables 3 and 4, Finland reported information on its mitigation actions implemented and planned since its fifth national communication (NC5) to achieve its target. Mitigation actions cover all sectors and gases, with emphasis on energy efficiency and renewable energy sources in the energy sector. Finland also reported on the use of units from market-based mechanisms and LULUCF to achieve its targets.

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<sup>4</sup> The quantified economy-wide emission reduction target is expressed using the GWP values from the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report, while emission levels are assessed using the values from the IPCC 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".

19. The ERT reviewed the reported information and provided its assessment of progress made towards achieving the target. The ERT noted the progress made by Finland in achieving its economy-wide emission reduction target, with a 4.9 per cent reduction of GHG emissions achieved by 2011 compared with the base-year level, and a 10.1 per cent emission reduction between 2010 and 2011.

20. Finland's emission reduction target in the second commitment period is part of the overall EU target of a 20 per cent reduction of GHG emissions by 2020 in comparison to the 1990 level as set by the EU climate and energy package. Based on the principle of cost-effectiveness, this target was further divided into two specific targets. The first one aims at large emission sources which are included in the EU ETS, and the second one aims at other emission sources in the energy, transport, industrial processes, agriculture and waste sectors (i.e. non-EU ETS sectors).

21. The majority of emission reduction will be achieved through the 21 per cent reduction of emissions in installations covered by the EU ETS. Finland's target for the non-EU ETS sector is to reduce emissions by 16 per cent in 2020 in comparison with the 2005 level. Projections presented in the sixth national communication (NC6) shows that Finland is on track to meet this target. The main challenges to meeting the target are related to the effective implementation of policies and measures (PaMs) to promote energy efficiency and increase the share of renewable energy sources in the energy sector, including transport.

## **1. Mitigation actions and their effects**

22. Finland has provided in its BR1 comprehensive and well-organized information on its package of mitigation actions introduced 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. The information reported in CTF table 3 gives an overview of the emission reductions in 2020 resulting from the key mitigation actions taken by Finland in the different sectors.

23. The key climate policy targets and measures are incorporated in the National Energy and Climate Strategy, which was updated in 2013 and implements the targets of the EU climate and energy package for 2020. PaMs included in the National Energy and Climate Strategy are related to the improvement of energy efficiency and enhancement of renewable energy in the economic sectors, the development of the energy market, the improvement of the district heating and cogeneration systems, the development of clean technologies and adaptation to climate change.

24. The PaMs in the energy sector, which are mostly related to energy efficiency and renewables, will deliver the largest emission reductions, followed by the effect of PaMs implemented in the transport, waste and industrial processes sectors. In terms of the magnitude of emission reductions from the PaMs, the largest contribution is estimated to come from the promotion of biomass (wood chips), resulting in an expected emission reduction of 9,861 kt CO<sub>2</sub> eq by 2020. This is followed by the voluntary energy efficiency agreements that cover industries and municipalities as well as the transport, housing and oil sectors; these are expected to result in an emission reduction of 5,585 kt CO<sub>2</sub> eq by 2020. In addition, the promotion of wind power is estimated to achieve an emission reduction of 3,600 kt CO<sub>2</sub> eq by 2020.

25. As climate policy is integrated in energy production, transport, agriculture, forestry and land use and other planning, the relevant ministries are responsible for the monitoring and evaluation of the respective PaMs. Under the monitoring, reporting and verification system established by the Finnish Government, operators or owners of installations covered

by the EU ETS are responsible for emission reductions in accordance with the European Union-wide target. For the non-EU ETS sector, Finland plans to reduce emissions by 16 per cent in 2020 in comparison with the 2005 level. Projections presented in the NC6 shows that Finland is on track to meet this target.

26. Table 2 provides a concise summary of the key mitigation actions implemented by Finland to achieve its target.

Table 2

**Summary of information on mitigation actions reported by Finland**

<i>Sectors affected</i>	<i>List of key policies and measures</i>	<i>Estimate of mitigation impact (kt CO<sub>2</sub> eq in 2020)</i>
<b><i>Policy framework and cross-sectoral measures</i></b>	National Energy and Climate Strategy, Government Foresight Report on Long-term Climate and Energy Policy  EU climate and energy package for 2020 and the EU Emissions Trading System	80–95% reduction in relation to 1990 emissions by 2050
<b><i>Energy</i></b>		
Renewable energy	Promotion of wind power Promotion of biomass (wood chips)	3 600 9 861
Energy efficiency	Voluntary energy efficiency agreements Energy Audit Programme	5 583 564
Residential and commercial sectors	Implementation of the Directive on the Energy Performance of Buildings	2 127
<b><i>Transport</i></b>	Promotion of the use of biofuels Renewing the vehicle fleet	2 000 2 100
<b><i>Industrial sectors</i></b>	Implementation of the European Union regulation on certain fluorinated greenhouse gases (842/2006/EC)	1 000
<b><i>Agriculture</i></b>	Increase in the area of multiannual crops on organic soils	557
<b><i>Forestry</i></b>	National Forest Programme 2015  Increasing the area of multiannual crops on organic soils	NA  776.1
<b><i>Waste management</i></b>	Implementation of the Finnish Government's decision on packaging and packaging waste (to meet European Union and domestic requirements)  Implementation of the new European Union regulation on landfills	2 300  200

*Note:* The greenhouse gas reduction estimates, given for some measures (in parentheses) are reductions in carbon dioxide or carbon dioxide equivalent for 2020.

*Abbreviation:* NA = not applicable.

27. In its BR1, Finland reported that no major 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, have occurred since the submission of the previous national communication (NC). Finland reported that a working group has been established to prepare its Climate Change Act aiming at regulating emission reductions for the non-EU ETS sector and making the development of emission reduction measures systematic and predictable.

28. Finland provided, to the extent possible, detailed information on the assessment of the economic and social consequences of response measures. Finland's major initiatives aiming at minimizing adverse impacts include the adoption of a climate sustainability tool for assessing the climate change impacts of its development policy and preventing the adverse impacts of climate change, participation in the development of sustainability criteria for biofuels through scientific studies, and the promotion of low-carbon development and the capacity of its partner countries to adapt to climate change. The ERT commends Finland for its commitment to assessing the consequences of its response measures, its actions 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, and its reporting on these actions.

## 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

29. Finland reported in its BR1 and CTF table 4 on its plans to use market-based mechanisms under the Convention and on the contribution from LULUCF. The ERT noted that Finland used the notation keys "NA" and "NE" for CTF tables 4, 4(a)I, 4(a)II and 4(b). Finland explained that since the LULUCF sector is not included in the EU joint target by 2020, contributions from the LULUCF sector in emissions and removals is not applicable. Finland also explained that the table on the use of units of market-based mechanisms is not filled in because there are no decisions yet on the use of units from mechanisms for meeting Finland's share of the EU joint target. Furthermore, the use of the units from the Kyoto Protocol mechanisms to be used for meeting the commitments of the first commitment period of the Kyoto Protocol will be known only at the end of the true-up period. Preliminary data on emissions during 2008–2012 show that Finland can meet its commitments for the first commitment period of the Kyoto Protocol without use of units from the mechanisms. Table 3 illustrates how Finland reported on the use of units from market-based mechanisms and LULUCF to achieve its target in the CTF tables.

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 Finland

<i>Year</i>	<i>Emissions excluding LULUCF (kt CO<sub>2</sub> eq)</i>	<i>LULUCF emissions/removals (kt CO<sub>2</sub> eq)</i>	<i>Emissions including LULUCF (kt CO<sub>2</sub> eq)</i>	<i>Use of units from the market-based mechanisms (kt CO<sub>2</sub> eq)</i>
Base year (1990)	70 452.31	NA	NA	NA
2010	74 551.43	NA	NA	0
2011	67 033.43	NA	NA	0

*Note:* The European Union unconditional commitment to reduce greenhouse gas emissions by 20 per cent by 2020 compared with 1990 does not include emissions/removals from LULUCF.

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

## 3. Projections

30. Finland has provided in its BR1 and CTF tables 5 and 6 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. Finland provided complete information on key variables and assumptions used in the projection analysis in CTF table 5, as well as trends and projections in CTF table 6(a) for the ‘with measures’ scenario and in CTF table 6(b) for the ‘with additional measures’ scenario.

31. Some assumptions have been changed from those in the NC5 and previous national climate and energy strategies that provide the basis for emission projections. These include decreased gross domestic product growth due to global economic and financial crises which started in 2008, the structural adjustment of the Finnish forest industry, which is of strategic importance to the Finnish economy, the postponement of the start-up of a new nuclear installation Olkiluoto 3, and the development of a more efficient transport sector, including the higher promotion of biofuels. These updated assumptions in the NC6 and BR1 caused significant reductions in the overall GHG emission trend up to 2020 and 2030 in comparison with the NC5.

32. The ERT noted information reported by Finland on projected emission trends by 2020 and 2030. According to the reported information, the projected emission trends are 9.3 per cent and 12.4 per cent below the base year by 2020 in the ‘with measures’ and ‘with additional measures’ projections, respectively. Projected emissions in the ‘with measures’ and ‘with additional measures’ scenarios by 2030 are 28.7 per cent and 36.5 per cent below the base year by 2030. According to the ‘with measures’ scenario, the emissions from the non-EU ETS sector (excluding the LULUCF sector) in 2020 will be around 17 per cent below the 2005 level, which is in accordance with Finland’s target for the non-EU ETS sector (16 per cent emission reduction in 2020 in comparison with the 2005 level), or 28.4 Mt CO<sub>2</sub> eq in absolute figures.

## **D. Provision of financial, technological and capacity-building support to developing country Parties**

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

33. In its BR1 and CTF table 7, Finland reported detailed information on the provision of financial, technological and capacity-building support required under the Convention. Financial support is provided for the purpose of assisting Parties not included in Annex I to the Convention (non-Annex I Parties) to mitigate GHG emissions and adapt to the adverse effects of climate change and any economic and social consequences of response measures, and for capacity-building and technology transfer in the areas of mitigation and adaptation, where appropriate.

34. In its BR1, Finland described how its resources address the adaptation and mitigation needs of non-Annex I Parties. During the years when fast-start finance is provided, Finland, following the European Union reporting format, tried to divide allocations based on whether they relate to adaptation, mitigation or reducing emissions from deforestation and forest degradation (REDD-plus).<sup>5</sup> During these years, mitigation support is close to 50 per cent (excluding REDD-plus), while the share for adaptation support varies between 30 and 40 per cent. Table 4 includes some of the information reported by Finland on its provision of financial support.

35. Finland provided details in its BR1 on what “new and additional” financial resources it has provided and clarified how these resources are “new and additional”. A detailed review of the reported information is provided in chapter II.D of the IDR/NC6.

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<sup>5</sup> Policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries.

**Table 4**  
**Summary of information on provision of financial support in 2011–2012**  
(Millions of euros)

<i>Allocation channel of public financial support</i>	<i>Years of disbursement</i>	
	2011	2012
Official development assistance (ODA)	1 011	1 027
Climate-related bilateral ODA	35.35	33.36
Contributions through multilateral channels, including:		
Contribution to the Global Environment Facility	15	13.65
Fast-start finance	34.70	81.50

## 2. Approach used to track support provided

36. Finland provided financial support through multilateral, bilateral, regional and other channels. Multilateral aid to support developing countries' climate actions has been provided mainly through the Global Environment Fund (GEF), the Least Developed Countries Fund (LDCF) and the Special Climate Change Fund (SCCF). In addition, Finland supports projects and programmes that promote environmentally sustainable development in its partner countries and regions. In the energy sector, for example, solutions are being sought for promoting the use of renewable natural resources in developing countries.

37. Finland uses the Rio markers developed for the Creditor Reporting System of the Development Assistance Committee of the Organisation for Economic Co-operation and Development to track adaptation and mitigation-related (and also biodiversity and desertification-related) finance based on the data provided in the system. As the Rio markers give qualitative rather than quantitative information, there is a need for follow-up work in order to obtain quantitative results. All of the projects that have an environmental marker in the system are checked. After obtaining a complete set of environment-related (i.e. climate change) projects, specialists at the Ministry for Foreign Affairs go through the projects and analyse the share of climate change projects relative to total project disbursements.

38. During the review week, Finland provided more information on assumptions used to produce information on finance. Support for sustainable development is the underlying assumption for Finland's assistance to developing countries. When supporting sustainable development in developing countries, Finland strives to enhance climate sustainability using the opportunities for supporting adaptation as a necessary part of long-term development as well as facilitating low-emission development paths for developing countries. Furthermore, the underlying assumption is that when Finland gives support, it responds to the needs of the countries and it is based on full ownership by partners as agreed in the Paris Declaration on Aid Effectiveness.

39. In addition, when Rio markers are used to track adaptation and mitigation-related finance, the assumption is that the adaptation marker is used for projects that intend to reduce the vulnerability of human or natural systems to the impacts of climate change and climate-related risks by maintaining or increasing adaptive capacity and resilience. The mitigation marker is used for projects that contribute to the objective of stabilizing GHG concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system by promoting efforts to reduce or limit GHG emissions or to enhance GHG sequestration.

40. In terms of thematic support provided through multilateral institutions, Finland has contributed EUR 3.5 million to the project ‘Making agriculture part of the solution to climate change – Building capacities for Agriculture mitigation’, which was implemented by the Food and Agriculture Organization of the United Nations (FAO) during 2010–2014. Finland’s overall support for the programme amounts to USD 30 million.

41. Indicators are used to measure the achievement of the objectives of financial support and they help to monitor and evaluate the progress of project implementation. Indicators are project or fund-specific, and there are no specific climate indicators being developed for the specific purpose of the UNFCCC. Finland uses the financing mechanisms of the Convention as well as other bilateral and multilateral channels such as FAO and the United Nations Development Programme.

42. With regard to the most recent financial contributions to enhance the implementation of the Convention by developing countries, Finland has committed itself to provide EUR 131 million through fast-start finance during 2010–2012. In addition, Finland contributes EUR 57.3 million to the GEF during the fifth replenishment period to prevent and mitigate global environmental problems in developing countries.

### **3. Technology development and transfer**

43. In its BR1 and CTF table 8, Finland has provided information on activities related to the transfer of technology to developing countries, including information on the public and private sectors. Finland has specific programmes and financial arrangements for transferring environmentally sound technology to developing countries. These activities consist of transferring both ‘soft’ and ‘hard’ technologies.

44. During the reporting period, the Finnish Fund for Industrial Cooperation Ltd (Finnfund) financed renewable energy production projects in Cabo Verde, Honduras, Lao People’s Democratic Republic, Sri Lanka and Thailand, and tree planting projects in the United Republic of Tanzania and Uruguay. Finnfund has also invested in the Central American Renewable Energy and Cleaner Production Facility and the Evolution One Fund, which are investing in renewable and clean technologies in Central America and southern Africa.

45. The information in the BR1 is not fully transparent with regard to Finland’s support for the development and enhancement of the endogenous capacities and technologies of developing countries. During the review week, Finland provided more information on this. In bilateral cooperation, Finland ensures country ownership through negotiations with partner countries to set priorities that are in the interest of the developing countries. The project documents are agreed upon by the partner countries at the end of negotiations. The ERT recommends that Finland provide more information on this in the next biennial report (BR) to improve the transparency of its reporting.

46. In addition, the ERT noted that Finland did not clearly distinguish between technology transfer activities undertaken by the public sector and those undertaken by the private sector. Finland explained that it promotes business-to-business partnerships in environmentally sound technologies through Finnpartnership as part of a wider set of aid for trade interventions. During the review, Finland elaborated on the difficulty in distinguishing activities undertaken by the public and private sectors. The ERT recommends that Finland continue to explore ways to improve transparency of reporting on such information in its NC.

47. With regard to the priorities for technology transfer in the area of adaptation, the most important element has been capacity-building and vulnerability assessments in the partner countries. Priority areas for capacity-building have been hydrometeorological services at all levels as well as the development of renewable energy and energy efficiency.

48. Finnfund and the Finnish Business Partnership Programme are active in the climate change field. Finnfund is a state-owned company that finances private projects in developing countries by providing long-term risk capital for profitable projects. The funding modalities include equity investments, loans and/or guarantees. It cooperates with Finnish and foreign companies, investors and financiers.

#### **4. Capacity-building**

49. In its BR1 and CTF table 9, Finland has provided information on how it has provided capacity-building support for mitigation, adaptation and technology. Finland supports capacity-building of non-Annex I Parties through several types of projects. Most of the Finnish bilateral projects have a principal objective related to climate change that includes a capacity-building component.

50. Finland also provides support to several multilateral climate-related funds (such as LDCF, SCCF, the Forest Carbon Partnership Facility and the World Bank's Partnership for Market Readiness), which include a strong capacity-building component in their activities. As an example, Finland is one of the world leaders as a donor supporting capacity-building for the hydrometeorological services of non-Annex I Parties at all levels. Presently, the most important capacity support programmes for hydrometeorological institutions are being implemented in the Pacific, Himalayan and Andean regions.

51. For the past 10 years, Finland has funded an international course on environmental law and diplomacy. This course on multilateral environmental agreements is organized annually by the University of Eastern Finland in cooperation with the United Nations Environment Programme (UNEP) and partners in developing countries. Since 2008, Finland has been supporting a project being implemented by the Global Gender and Climate Alliance to strengthen the role of women and to mainstream the gender perspective in global climate policy. The total contribution has been EUR 6.8 million for the implementation period 2008–2014.

52. In addition, the Southeast Asia Climate Change Network project was implemented by UNEP in 2008. It uses a regional network approach to improve the development and exchange of knowledge among climate change focal points, national coordinating bodies and climate change professionals.

### **III. Conclusions**

53. The ERT conducted a technical review of the information reported in the BR1 and CTF tables of Finland in accordance with the UNFCCC reporting guidelines on BRs. The ERT concludes that the BR1 and CTF tables provides a good overview of information on emissions and removals related to the quantified economy-wide emission reduction target, descriptions of the target, progress made by Finland towards achieve its target, and provision of support to developing country Parties. During the review, Finland provided additional information on financial support it has committed and/or pledged, assumptions used to produce information on finance, and its support for the development and enhancement of the endogenous capacities and technologies of developing countries.

54. Finland's emissions for 2011 were estimated to be 4.9 per cent below its 1990 level excluding LULUCF and 23.2 per cent above including LULUCF. Emission decreases were driven mainly by severe economic recession in the period 2008–2009 and also by the changes in energy supply structure with increased share of renewable energy sources, a decline in the livestock population and nitrogen fertilization, improvements in waste treatment and the implementation of N<sub>2</sub>O-abatement technologies in the industrial processes sector. Other factors which impact the trend of GHGs in Finland are the net

import of electricity from the regional electricity market, which varies considerably from year to year due to variations in hydropower production in Nordic countries and changes in average annual temperature which are reflected in occurrence of warmer winters in a recent period.

55. Finland participates in achieving the European Union quantified economy-wide target to achieve 20 per cent reduction of emissions by 2020 compared with the 1990 base-year level. The target for the European Union and its member States is based on the European Union's Energy and Climate Package. This includes the EU ETS and the effort-sharing decision for the non-EU ETS sector. The quantified economy-wide target covers all gases and all sectors excluding the LULUCF sector.

56. Finland does not have a national quantified economy-wide emission reduction target. Emissions that fall under the ETS sector contribute to the EU ETS target of a 21 per cent reduction by 2020 compared to 2005. For the non-EU ETS sector (excluding LULUCF), the European Union wide target of a 20 per cent emission reduction in 2020 compared to the base year has been translated into a 16 per cent reduction target for Finland (compared to 2005).

57. In BR1, Finland presents GHG projections for the period from 2015 to 2030. Two scenarios are presented: the 'with measures' scenario and the 'with additional measures' scenario. The projected reductions in GHG emissions under the 'with measures' and 'with additional measures' scenarios in 2020 are 9.3 and 12.4 per cent, respectively. Projected emissions in the 'with measures' and 'with additional measures' scenarios by 2030 are 28.7 per cent and 36.5 per cent below the base year by 2030. For the non-EU ETS sector, GHG emissions are projected to be 17 per cent below the 2005 level by 2020. This demonstrates that Finland is on track to meet its non-EU ETS target of 16 per cent emission reduction by 2020 compared with the 2005 level.

58. The National Energy and Climate Strategy implements the targets of the EU climate and energy package for 2020. PaMs included in the National Energy and Climate Strategy are related to the improvement of energy efficiency and enhancement of renewable energy in the economic sectors, the development of the energy market, the improvement of the district heating and cogeneration systems, the development of clean technologies and adaptation to climate change. The PaMs in the energy sector, which are mostly related to energy efficiency and renewables, will deliver the largest emission reductions, followed by the effect of PaMs implemented in the transport, waste and industrial processes sectors. Finland has not yet decided on the use of market-based mechanisms under the Convention, given that Finland plans to achieve its reduction target in the non-EU ETS sector without these supplemental mechanisms.

59. In the BR1, Finland has provided detailed information on the financial, technological and capacity-building support provided to non-Annex I Parties. Finland also clarified how the financial resources it provided are "new and additional". Finland has committed to provide EUR 131 million through fast-start finance during 2010–2012. In addition, Finland contributes EUR 57.3 million to the GEF during the fifth replenishment period to prevent and mitigate global environmental problems in developing countries. Through the Finnfund, Finland financed renewable energy production projects in in Cabo Verde, Honduras, Lao People's Democratic Republic, Sri Lanka and Thailand, and tree planting projects in the United Republic of Tanzania and Uruguay. Finnfund has also invested in renewable and clean technologies in Central America and southern Africa. Furthermore, Finland promotes business-to-business partnerships in environmentally sound technologies among entrepreneurs from Finland and developing countries.

60. In the course of the review, the ERT formulated several recommendations relating to the completeness and transparency of Finland's reporting under the Convention. The key

recommendations<sup>6</sup> are that Finland improve the transparency of reporting by including in the next BR the following information:

- (a) More detailed information on support for the development and enhancement of endogenous capacities and technologies of developing countries;
- (b) More information on distinguishing between technology transfer activities undertaken by the public sector and those undertaken by the private sector.

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<sup>6</sup> 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/2012/FIN. Report of the individual review of the annual submission of Finland submitted in 2012. Available at <<http://unfccc.int/resource/docs/2013/arr/FIN.pdf>>.

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

FCCC/IDR.5/FIN. Report of the in-depth review of the fifth national communication of Finland. Available at <<http://unfccc.int/resource/docs/2010/idr/fin05.pdf>>.

Sixth national communication of Finland. Available at <[http://unfccc.int/files/national\\_reports/annex\\_i\\_natcom/submitted\\_natcom/application/pdf/fi\\_nc6\[1\].pdf](http://unfccc.int/files/national_reports/annex_i_natcom/submitted_natcom/application/pdf/fi_nc6[1].pdf)>.

First biennial report of Finland. Available at <[http://unfccc.int/files/national\\_reports/biennial\\_reports\\_and\\_iar/submitted\\_biennial\\_reports/application/pdf/fi\\_br1.pdf](http://unfccc.int/files/national_reports/biennial_reports_and_iar/submitted_biennial_reports/application/pdf/fi_br1.pdf)>.

2013 greenhouse gas inventory submission of Finland. Available at <[http://unfccc.int/national\\_reports/annex\\_i\\_ghg\\_inventories/national\\_inventories\\_submissions/items/7383.php](http://unfccc.int/national_reports/annex_i_ghg_inventories/national_inventories_submissions/items/7383.php)>.

#### B. Additional information provided by the Party

Responses to questions during the review were received from Ms. Paula Perälä (Ministry of the Environment), including additional material on updated policies and measures, greenhouse gas projections, the national registry and recent climate policy developments in Finland.