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Report of the technical review of the second biennial report of Norway

According to decision 2/CP.17, developed country Parties are requested to submit their second biennial reports by 1 January 2016, that is, two years after the due date for submission of a full national communication. This report presents the results of the technical review of the second biennial report of Norway, 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. This report covers the centralized technical review of the second biennial report (BR2)¹ of Norway. The review was organized 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”, particularly “Part IV: UNFCCC guidelines for the technical review of biennial reports from Parties included in Annex I to the Convention” (annex to decision 13/CP.20). In accordance with the same decision, a draft version of this report was communicated to the Government of Norway, which provided comments that were considered and incorporated with revisions into this final version of the report.

2. The review took place from 7 to 12 March 2016 in Bonn, Germany, and was conducted by the following team of nominated experts from the UNFCCC roster of experts: Mr. Roberto Acosta Moreno (Cuba), Mr. Oluseyi Adefisan (Nigeria), Mr. Quosay Awad Ahmed Babiker (Sudan), Mr. Pierre Brender (France), Ms. Hanna Brolinson (Sweden), Mr. Zeljko Juric (Croatia), Mr. Seungdo Kim (Republic of Korea), Mr. Audace Ndayizeye (Burundi), Mr. Rostislav Neveceral (Czech Republic), Ms. Nadiia Pustovoitova (Ukraine) and Mr. Can Wang (China). Mr. Acosta Moreno and Ms. Brolinson were the lead reviewers. The review was coordinated by Ms. Inkar Kadyrzhanova and Mr. Davor Vesligaj (UNFCCC secretariat).

B. Summary

3. The expert review team (ERT) conducted a technical review of the information reported in the BR2 of Norway in accordance with the “UNFCCC biennial reporting guidelines for developed country Parties” (hereinafter referred to as the UNFCCC reporting guidelines on BRs). During the review, Norway provided the following additional relevant information: assumptions and conditions for the attainment of the target; the status of the implementation and availability of mitigation impact assessments of some of the policies and measures (PaMs) reported in the BR2; the domestic arrangements for the process of self-assessment of compliance with emission reduction targets; and the arrangements established to assess the economic and social consequences of its response measures.

1. Timeliness

4. The BR2 was submitted on 22 December 2015, before the deadline of 1 January 2016 mandated by decision 2/CP.17. The common tabular format (CTF) tables were submitted on 22 December 2015. Norway resubmitted the CTF tables on 6 January 2016.

2. Completeness, transparency of reporting and adherence to the reporting guidelines

5. Issues and gaps related to the reported information identified by the ERT are presented in table 1 below. The information reported by Norway in its BR2 is mostly in adherence with the UNFCCC reporting guidelines on BRs as per decision 2/CP.17.

¹ The biennial report submission comprises the text of the report and the common tabular format (CTF) tables. Both the text and the CTF tables are subject to the technical review.

Table 1
Summary of completeness and transparency issues related to mandatory reported information in the second biennial report of Norway

<i>Chapter of the biennial report</i>	<i>Completeness</i>	<i>Transparency</i>	<i>Paragraphs with recommendation:</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	Mostly transparent	15
Progress in achievement of targets	Mostly complete	Mostly transparent	19, 20, 37
Provision of support to developing country Parties	Mostly complete	Mostly transparent	49, 54, 55, 65

Note: A list of recommendations pertaining to the completeness and transparency issues identified in this table is included in chapter III.

II. Technical review of the reported information

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

6. Norway has provided a summary of information on greenhouse gas (GHG) emission trends for the period 1990–2013 in its BR2 and CTF tables 1(a)–(d). The BR2 provides summary information on the national inventory arrangements, which are explained in more detail in the national inventory report included in Norway’s 2015 annual inventory submission (in chapter 1 and annex 5). The national inventory arrangements were established in accordance with the reporting requirements related to national inventory arrangements contained in 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” (hereinafter referred to as the UNFCCC Annex I inventory reporting guidelines) that are required by paragraph 3 of the UNFCCC reporting guidelines on BRs.

7. Further, Norway provided information on changes in the national inventory arrangements since its first biennial report (BR1), which included the conclusion of new agreements among the Norwegian Environment Agency (the national entity with overall responsibility for the preparation of the national GHG inventory) and two collaborating institutions (Statistics Norway and the Norwegian Institute of Bioeconomy Research) for the period 2015–2022.

8. The information reported in the BR2 on emission trends is consistent with that reported in the 2015 annual inventory submission of Norway. To reflect the most recently available data, version 1.0 of Norway’s 2015 annual inventory submission has been used as the basis for discussion in chapter II.A of this review report.

9. In 2013, total GHG emissions² excluding emissions and removals from land use, land-use change and forestry (LULUCF) amounted to 53,716.01 kt of carbon dioxide

² 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.

equivalent (CO₂ eq) and increased by 3.3 per cent between 1990 and 2013, whereas total GHG emissions including net emissions or removals from LULUCF amounted to 27,582.47 kt CO₂ eq and decreased by 33.5 per cent over the same period. The increase in the total GHG emissions can be attributed mainly to carbon dioxide (CO₂) emissions, which increased by 24.8 per cent (excluding LULUCF) between 1990 and 2013. Over the same period, emissions of methane (CH₄) decreased by 13.5 per cent, while emissions of nitrous oxide (N₂O) decreased by 41.1 per cent. The combined fluorinated gases, such as perfluorocarbons (PFCs), hydrofluorocarbons (HFCs) and sulphur hexafluoride (SF₆), decreased by 76.7 per cent over the same period.

10. The emission trends were driven mainly by: the increase in emissions of CO₂ owing to increased activities related to oil and gas extraction and processing and road transportation; the reduction in emissions of PFCs from aluminium production as a result of technology improvements applied in the process; the reduction in emissions of SF₆ from aluminium and magnesium foundries as a result of the end of production of primary magnesium in 2002 and of the casting of magnesium in 2006; and the reduction in N₂O emissions from nitric acid production as a result of abatement technology applied in the process.

11. The ERT noted that, during the period 1990–2013, Norway's gross domestic product (GDP) per capita increased by 46.3 per cent, while GHG emissions per GDP and GHG emissions per capita decreased by 41.0 and 13.8 per cent, respectively, which could be considered as an important step towards the decoupling of GHG emissions from economic development and population growth. Table 2 below illustrates the emission trends by sector and some of the economic indicators relevant to GHG emissions for Norway.

Table 2

Greenhouse gas emissions by sector and some indicators relevant to greenhouse gas emissions for Norway for the period 1990–2013

Sector	GHG emissions (kt CO ₂ eq)					Change (%)		Share by sector (%)	
	1990	2000	2010	2012	2013	1990–2013	2012–2013	1990	2013
1. Energy	30 073.39	35 927.10	41 079.39	39 717.74	39 510.30	31.4	–0.5	57.8	73.6
A1. Energy industries	7 281.29	10 945.63	15 024.18	14 360.46	14 407.25	97.9	0.3	14.0	26.8
A2. Manufacturing industries and construction	4 030.17	4 406.18	4 333.33	4 019.16	4 082.03	1.3	1.6	7.7	7.6
A3. Transport	10 276.66	11 850.81	13 473.01	13 397.70	13 285.74	29.3	–0.8	19.8	24.7
A4.–A5. Other	5 112.80	4 053.60	4 585.91	4 396.79	4 156.85	–18.7	–5.5	9.8	7.7
B. Fugitive emissions from fuels	3 372.48	4 670.89	3 662.96	3 543.63	3 578.43	6.1	1.0	6.5	6.7
C. CO ₂ transport and storage	NO	IE, NO	IE, NO	IE, NO	IE, NO	NA	NA	NA	NA
2. IPPU	14 492.81	12 075.50	8 197.29	8 196.12	8 274.48	–42.9	1.0	27.9	15.4
3. Agriculture	5 159.27	5 008.75	4 479.50	4 442.80	4 462.51	–13.5	0.4	9.9	8.3
4. LULUCF	–10 551.90	–23 562.33	–25 429.37	–25 447.55	–26 133.54	147.7	2.7	NA	NA
5. Waste	2 297.50	1 872.70	1 569.90	1 506.97	1 468.72	–36.1	–2.5	4.4	2.7
6. Other	0.00	0.00	0.00	0.00	0.00	NA	NA	0.0	0.0

Sector	GHG emissions (kt CO ₂ eq)					Change (%)		Share by sector (%)	
	1990	2000	2010	2012	2013	1990–2013	2012–2013	1990	2013
	Total GHG emissions without LULUCF	52 022.98	54 884.05	55 326.08	53 863.62	53 716.01	3.3	–0.3	100.0
Total GHG emissions with LULUCF	41 471.08	31 321.73	29 896.72	28 416.07	27 582.47	–33.5	–2.9	NA	NA
<i>Indicators</i>									
GDP per capita (thousands 2011 USD using PPP)	43.30	58.70	62.95	63.62	63.32	46.3	–0.5	NA	NA
GHG emissions without LULUCF per capita (t CO ₂ eq)	12.27	12.22	11.32	10.73	10.57	–13.8	–1.5	NA	NA
GHG emissions without LULUCF per GDP unit (kg CO ₂ eq per 2011 USD using PPP)	0.28	0.21	0.18	0.17	0.17	–41.0	–1.0	NA	NA

Sources: (1) GHG emission data: Norway’s 2015 annual inventory submission, version 1.0; (2) GDP per capita data: World Bank.

Note: The ratios per capita and per GDP unit as well as the changes in emissions and the shares by sector are calculated relative to total GHG emissions without LULUCF using the exact (not rounded) values, and may therefore differ from the ratio calculated with the rounded numbers provided in the table.

Abbreviations: GDP = gross domestic product, GHG = greenhouse gas, IE = included elsewhere, IPPU = industrial processes and product use, LULUCF = land use, land-use change and forestry, NA = not applicable, NO = not occurring, PPP = purchasing power parity.

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

12. In its BR2 and CTF tables 2(a)–(f), Norway reported a description of its target, including associated conditions and assumptions. CTF tables 2(a)–(f) contain the required information in relation to the description of the Party’s emission reduction target. Further information on the target and the assumptions, conditions and methodologies related to the target is provided in chapter 3 of the BR2.

13. For Norway, the Convention entered into force on 21 March 1994. Under the Convention, Norway made a commitment to reduce its GHG emissions by 30.0 per cent by 2020 below the 1990 level. This target includes all GHGs included in the UNFCCC Annex I inventory reporting guidelines, namely CO₂, CH₄, N₂O, HFCs, PFCs, SF₆ and nitrogen trifluoride (NF₃). It also includes all Intergovernmental Panel on Climate Change (IPCC) sources and sectors included in the annual GHG inventory. The global warming potential (GWP) values used are those from the IPCC Fourth Assessment Report (AR4). Emissions and removals from the LULUCF sector are included in the target and accounted for using an activity-based approach. Norway reported that units from currently available market-based mechanisms, including carry-over of units, may be used to attain the emission reduction target. However, the possible scale of the annual contribution was not estimated and consequently it was reported as “NE” (not estimated) in CTF table 2(e)I.

14. Norway reported in its BR2 that the quantified economy-wide emission reduction target under the Convention is consistent with the quantified emission limitation or reduction commitment of 84.0 per cent of the base year emissions for the years 2013–2020,

as defined in the Doha Amendment to the Kyoto Protocol, which Norway ratified in 2014. Thus, compliance under the Kyoto Protocol should ensure that the Party meets the emission reduction target by 2020 under the Convention. Also, Norway in its BR2 provided information on official submission to the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol, including background presentation, which further elaborate on the consistency between these two targets.³

15. In its BR2, Norway provided brief information on the key assumptions and conditions for the attainment of its quantified economy-wide emission reduction target by 2020, including: the net contribution from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol, which entails afforestation, reforestation and deforestation; the inclusion of activities under Article 3, paragraph 4, of the Kyoto Protocol other than forest management; and the contribution from installations covered by the European Union Emissions Trading System (EU ETS). During the review, in response to a question raised by the ERT, Norway provided additional information on assumptions and conditions for the attainment of the target. The ERT recommends that Norway include this additional information related to assumptions and conditions for the attainment of its quantified economy-wide emission reduction target, particularly on uncertainties related to the contribution from installations in the EU ETS, in its next biennial report (BR) to enhance the transparency of its reporting.

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

16. This chapter provides information on the review of the reporting by Norway on the progress made in reducing emissions in relation to the target, mitigation actions taken to achieve its target, and the use of units from market-based mechanisms and LULUCF.

1. Mitigation actions and their effects

17. In its BR2 and CTF table 3, Norway reported on its progress in the achievement of its target and the mitigation actions implemented and planned since its sixth national communication (NC6) and BR1 to achieve its target. Norway has provided information on mitigation actions in CTF table 3 and in the identical table in chapter 4.1.1 of the BR2, organized by sector and by gas. The ERT noted that the transparency of Norway's reporting on mitigation actions in chapter 4.1.2 could benefit from grouping the description of the PaMs under sectoral headings. Further information on the mitigation actions related to the Party's target is provided in chapter 4.1 of the BR2 and in this report (see paras. 26–28 below).

18. In its BR2, Norway indicated that since its NC6/BR1, no changes had occurred 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 made towards its target.

19. In its BR2 Norway stated that the mitigation actions reported in CTF table 3 include only those important PaMs that are new or changed since its submission of the NC6/BR1. According to the UNFCCC reporting guidelines on BRs, Parties shall provide information

³ FCCC/KP/AWG/2012/MISC.1 Available at
<<http://unfccc.int/resource/docs/2012/awg17/eng/misc01.pdf>>;
<http://unfccc.int/files/meetings/ad_hoc_working_groups/kp/application/pdf/awgkp_norway_ppt.pdf>.

on its mitigation actions, including on the PaMs it has implemented or plans to implement since the NC6/BR1. The ERT therefore recommends that Norway, in its next BR, provide information on the entire scope of its mitigation actions, that is, those that are in implementation and planned to be implemented, including new PaMs that might be introduced in the period since the submission of the BR2 in order to enhance the completeness of its reporting.

20. The ERT noted that for many of the new and revised mitigation actions reported in the BR2 and CTF table 3, Norway did not provide an estimation of mitigation impacts in 2020 and 2030. In the BR2, Norway briefly explained the difficulties it had encountered in estimating the effects of PaMs that had been changed or adjusted, and this prevented the presentation of this information. During the review, in response to a question raised by the ERT, Norway provided additional information for some of the significant PaMs reported in CTF table 3 for which estimation of mitigation impact had not been provided as well as for those that had not been reported in the BR2 because they had not changed since the BR1. To enhance the transparency of reporting, the ERT recommends that Norway, in its next BR, estimate the impacts of the mitigation actions that are reported in CTF table 3, or explain in the BR in more detail the reasons why those impacts could not be estimated, in line with the additional information provided during the review.

21. The ERT noted that the reporting on the PaMs implemented, adopted or revised since the NC6/BR1 in the textual part of the BR2 and in CTF table 3 is not entirely consistent. For instance, chapter 4.1.2.15 of the BR2 presents details of development of carbon capture and storage projects, which are not reflected in CTF table 3. During the review, in response to a question raised by the ERT, Norway explained that it did not include this measure in CTF table 3 because the investment decision had not been made. However, the ERT noted that for some other planned measures (e.g. grants for the renewal of the fleet of cargo vessels in domestic coastal operation), the information was provided in CTF table 3. To enhance the transparency of reporting in its next BR, the ERT encourages Norway to ensure consistency in its reporting of information on mitigation actions between the BR and CTF table 3.

22. The ERT noted some minor inaccuracies in CTF table 3. For instance, Norway included information on different fiscal measures (e.g. the tax on mineral oil and the tax on HFCs and PFCs) and reported them as economic instruments, while the footnote to CTF table 3 distinguishes fiscal and economic instruments as two different categories. To improve the transparency of reporting, the ERT encourages Norway to address these inaccuracies, as appropriate, in its next BR.

23. Norway provided, to the extent possible, information on the arrangements established to assess the economic and social consequences of its response measures and presented what it had done to minimize such effects. Norway mentioned that it has established a legal framework for environmental impact assessments, and that the principles guiding the elaboration of its mitigation actions, namely the development of a comprehensive approach addressing all sources and sinks and the priority given to carbon pricing approaches, helped to minimize the impact of response measures.

24. Norway also presented information on the cooperation it has established with developing countries to minimize the adverse effects of response measures by fostering technology transfer and capacity-building to shift the energy mix to renewable energy sources and by helping interested developing countries that are fossil fuel producers to make the best use of these revenues, thus enhancing their resilience to any social and economic effects of response measures taken.

25. Norway reported summary information on the domestic arrangements established for the process of self-assessment of compliance with emission reduction commitments. In

particular, Norway stated that the compilation of the annual submissions of its GHG inventories including the compilation of its standard electronic format tables for compliance under the Kyoto Protocol, which are subject to technical review, is the basis for its process of self-assessment of compliance, considering that its target under the Convention was made operational through the legally binding commitment for 2013–2020 under the Kyoto Protocol. Norway also provided summary information on the progress it has made in the establishment of national rules for taking action against non-compliance with emission reduction targets, stating that it has set up provisions for the enforcement of different obligations and decisions made in accordance with the law, and referred to chapter 4.3 of its NC6 where more details were provided about the Pollution Control Act and the Greenhouse Gas Emissions Trading Act.

26. In the BR2, the reporting on mitigation actions includes a description of the main principles on which the PaMs for the reduction of the GHG emissions in Norway were established, including: the “polluter-pays” principle; cost-effectiveness; technological development and innovation; and changes in consumer behaviour. In addition, Norway provided, in its BR2, a concise description of mitigation actions in specific areas such as energy, transport, carbon capture and storage and forestry. In this regard, Norway has implemented several key legislative arrangements to reduce emissions of GHGs, such as the Pollution Control Act, the Greenhouse Gas Emissions Trading Act, the CO₂ Tax Act and the Petroleum Act, as well as requirements under the Planning and Building Act.

27. Norway explained in the BR2 that it gives priority to the implementation of the carbon pricing instruments, because these form the basis for decentralized, cost-effective and informed mitigation actions. Carbon pricing, alongside taxes such as the CO₂ tax applied on mineral products, the base tax on mineral oil, and the tax on HFCs and PFCs in products, includes market-based instruments such as the EU ETS and the renewable electricity certification system. The BR2 indicates that, since 2013, emissions sources that contribute more than 80 per cent of domestic GHG emissions are covered either by CO₂ taxation or the EU ETS. In addition, according to the BR2, electricity generation in Norway is almost exclusively from renewable energy sources, as over 95 per cent is produced by hydropower plants, which implies that a further increase in energy efficiency and new renewable energy capacities will have a limited effect on the reduction of GHG emissions in Norway in the future.

28. During the review, in response to a question raised by the ERT, Norway provided additional information on some of the significant mitigation actions for which estimates of the mitigation effects were not provided in the BR2. The Norwegian energy fund provides a stable source of finance to promote the development of energy and climate technologies and to promote an environmentally friendly change in the production and consumption of energy. A common Norwegian–Swedish market-based support system for electricity certificates aims at increasing renewable energy electricity production in both countries. Exemption from purchase tax and value added tax provides a strong incentive for the purchase of ‘zero-emissions’ cars, considering that the purchase tax is very high in Norway. Norway also mentioned large investments made in its railway infrastructure. Norway also provided additional information, elaborating on the GHG emissions that were not covered by explicit carbon pricing, including CH₄ and N₂O from the agriculture sector, and, to some extent, CH₄ from the waste sector. Norway further clarified that for those emissions, regulatory instruments were applied, such as the ban of organic waste in landfills and the planning of farming operations.

29. Table 3 below provides a concise summary of the key mitigation actions that are new or that are changed since the NC6/BR1 and some estimates of their mitigation effects reported by Norway to achieve its target since the previous BR.

Table 3
Summary of information on mitigation actions and their impacts reported by Norway

<i>Sector affected</i>	<i>List of key mitigation actions</i>	<i>Estimate of mitigation impact by 2020 (kt CO₂ eq)</i>	<i>Estimate of mitigation impact by 2030 (kt CO₂ eq)</i>
Policy framework and cross-sectoral measures	Contribution to the development of energy and climate technologies by the Norwegian energy fund	NE	NE
Energy, including:	Changes in the CO ₂ tax on mineral products and on the base tax on mineral oil	150–250	150–250
Transport	Increase of the incentive represented by the tax exemption for low- and zero-emission cars and an increase in investment in the railway transport system	NE	NE
Renewable energy	Increase in the mandatory incorporation of biofuels	120	90
Energy efficiency	Strengthening of the energy requirements in the building code	NE	NE
IPPU	Increase in the tax on HFCs and PFCs in products	NE	NE
Agriculture	Grants and subsidies for biogas projects	NE	NE
LULUCF	Fertilization of forests	NE	140–270

Note: The estimates of mitigation impact are estimates of emissions of carbon dioxide or carbon dioxide equivalent avoided in a given year as a result of the implementation of mitigation actions.

Abbreviations: IPPU = industrial processes and product use, LULUCF = land use, land-use change and forestry, NE = not estimated.

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

30. Norway reported in its BR2 and CTF tables 4, 4(a)I, 4(a)II and 4(b) its use of units from market-based mechanisms under the Convention and the contribution of LULUCF to achieving its target. This information was provided for the period 2008–2012. Further relevant information on emissions and removals and the use of units is provided in chapter 4.4 of the BR2.

31. Norway stated in its BR2 that it was not possible to report CTF table 4(a)II because of a problem with the CRF Reporter software during the 2015 reporting cycle. However, it provided in annex 2 to the BR2 information on the commitment period accounting for emissions and removals from LULUCF activities under Article 3, paragraph 3, and elected activities under Article 3, paragraph 4, of the Kyoto Protocol for the period 2008–2012 using an activity-based approach, as reported in the tables in the 2014 annual inventory submission.

32. Norway reported in its BR2 that it may use units from all available market-based mechanisms under the Convention, including carry-over of units, if necessary, to attain its target. Norway reported in CTF table 4 information on units surrendered by the installations in Norway that are covered by the EU ETS, and transferred to its retirement account in the registry in the period 2009–2012. Table 4 below illustrates Norway's total GHG emissions,

the contribution of LULUCF and the use of units from market-based mechanisms to achieve its target under the first commitment period of the Kyoto Protocol.

Table 4

Summary of 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 by Norway towards the achievement of its target

<i>Year</i>	<i>Emissions excluding LULUCF (kt CO₂ eq)</i>	<i>Contribution from LULUCF (kt CO₂ eq)</i>	<i>Emissions including contribution from LULUCF (kt CO₂ eq)</i>	<i>Use of units from market-based mechanisms (kt CO₂ eq)</i>
1990	NA	NA	NA	NA
2008	54 494.91	0.00	54 494.91	NA
2009	51 878.56	0.00	51 878.56	19 342.24
2010	54 373.12	0.00	54 373.12	19 217.10
2011	53 320.66	0.00	53 320.66	19 333.29
2012	52 757.24	0.00	52 757.24	19 132.76

Sources: Norway's second biennial report and common tabular format tables 1, 4, 4(a)I, 4(a)II and 4(b).

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

33. To assess the progress towards the achievement of the 2020 target, the ERT noted that Norway's emission reduction target under the Convention is 30.0 per cent below the 1990 level (see para. 13 above). This target is consistent with the quantified emission limitation or reduction commitment of 84.0 per cent of the base year emissions for the years 2013–2020, as defined in the Doha Amendment to the Kyoto Protocol, which Norway ratified in 2014. As discussed in chapter II.B above, in 2013, Norway's annual total GHG emissions excluding LULUCF were 3.3 per cent above the base year level. The ERT also noted that projected total GHG emissions under the 'with measures' (WEM) scenario has a moderately increasing trend and in 2020 is expected to reach 54,852.55 kt CO₂ eq, which is 5.4 per cent above the base year level (see para. 42 below).

34. The ERT noted that Norway is making progress towards its emission reduction target by implementing mitigation actions; however, on the basis of the results of the projections (see para. 42 below), the ERT also noted that the Party may face challenges in the achievement of its target under the Convention and the Kyoto Protocol, and would need to further strengthen domestic mitigation actions and/or acquire units from market-based mechanisms in the period 2013–2020. In this regard, Norway reported in its BR2 that it is in the process of purchasing approximately 60 million units from market-based mechanisms, which should be delivered in the aforementioned period.

3. Projections

35. Norway reported in its BR2 and CTF table 6(a) updated projections for 2020 and 2030 relative to actual inventory data for 2013 under the WEM scenario. Projections are presented on a sectoral basis, using the same sectoral categories as used in the chapter on mitigation actions, and on a gas-by-gas basis for the following GHGs: CO₂, CH₄, N₂O, PFCs, HFCs and SF₆. Projections are also provided in an aggregated format for each sector as well as for a Party total, using GWP values from the IPCC AR4. Norway reported on the key factors and activities influencing emissions for each sector. Further information on the projections is provided in chapter 5 of the BR2.

36. The ERT noted that the information in CTF table 6(a) on actual GHG emission data for the preceding years (1990–2011) is not fully consistent with that reported in CTF table 1. To enhance the transparency of reporting, the ERT encourages Norway to provide more consistent information on GHG emission trends in CTF table 6(a) based on information from CTF table 1, in its next BR.

37. The ERT noted that emission projections related to fuel sold to ships and aircraft engaged in international transport were not reported separately and were not included in the totals. During the review, in response to a question raised by the ERT, Norway explained that emission projections related to fuel sold to ships and aircraft engaged in international transport were reported in the NC6 and have not been updated since, neither have they been included in the totals in the BR2. The ERT recommends that Norway, to the extent possible, include this information in its next BR to enhance the transparency of its reporting.

38. Norway provided information on the changes since the submission of its NC6/BR1, including the use of GWP values from the IPCC AR4, the new methodologies and emission factors for estimating emissions from some categories to ensure consistency between historical GHG emission trends and projections, and differences in some underlying assumptions related to production of oil and gas and transport. It also reported that no changes occurred in the methods and models used in the preparation of the projections. The BR2 did not include an analysis of the sensitivity of the WEM projection to underlying assumptions. The ERT encourages Norway to include qualitative and, where possible quantitative, analysis of the sensitivity of projections to underlying assumptions in its next BR.

Overview of projection scenarios

39. The WEM scenario reported by Norway includes implemented and adopted PaMs up to the third quarter of 2014. During the review, in response to a question raised by the ERT, Norway explained that the ‘baseline’ scenario (the single scenario reported in the BR2) matches the definition of the WEM scenario according to the “Guidelines for the preparation of national communications by Parties included in Annex I to the Convention, Part II: UNFCCC reporting guidelines on national communications”.

Methodology and changes since the previous submission

40. The methodologies used in the BR2 are identical to those used for the preparation of the emission projections for the NC6/BR1. The energy-related emission projections are based on the results of the macroeconomic general equilibrium model developed by Statistics Norway, which is supplemented by available research studies. The emission projections from oil and natural gas systems are based on information received from individual operators and estimates made by the Norwegian Petroleum Directorate. Projections from other source categories are mainly based on bottom-up sectoral and plant-specific data collected by the Norwegian Environment Agency.

41. To prepare its projections, Norway relied on the following key underlying assumptions for the period up to 2030: increasing GDP and population; decreasing oil prices; decreasing domestic production of oil and gas; and moderate growth of the transport sector, counterbalanced with decreasing passenger-kilometres and higher emission standards for vehicles, as reported in the BR2 and CTF table 5. These assumptions have been updated since the NC6/BR1 on the basis of the most recent economic developments known at the time of the reporting on projections.

Results of projections

42. Norway's total GHG emissions excluding LULUCF in 2020 and 2030 are projected to be 54,852.55 and 52,489.26 kt CO₂ eq, respectively, under the WEM scenario, which is an increase of 5.4 and 0.9 per cent, respectively, above the 1990 level.

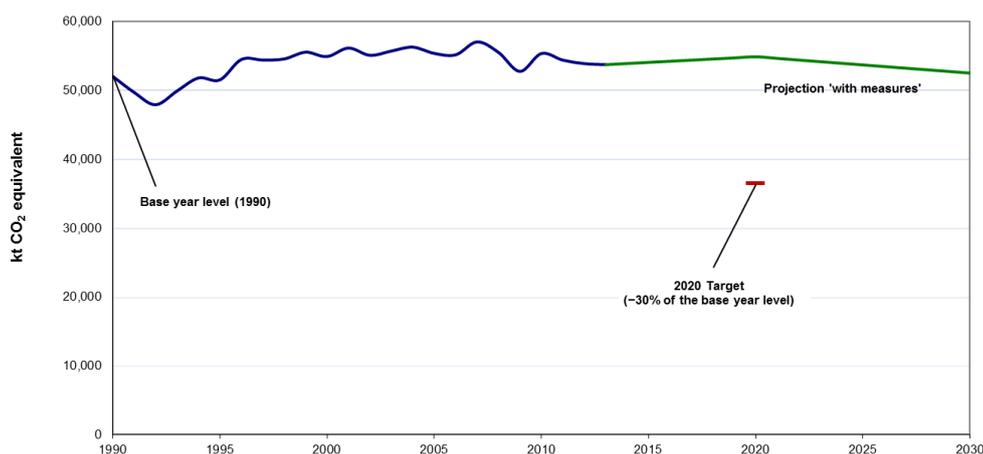
43. The 2020 projections suggest that Norway cannot be expected to achieve its 2020 target under the Convention without the acquisition of units through the market-based mechanisms and the expected contribution of the LULUCF sector (see paras. 33 and 34 above).

44. According to the projections reported by sector for 2020 under the WEM scenario, the most significant emission reductions are expected to occur in the industrial processes sector (5,911.98 kt CO₂ eq or 40.8 per cent), followed by the waste sector (1,289.18 kt CO₂ eq or 56.0 per cent) and the agriculture sector (716.57 kt CO₂ eq or 13.9 per cent) between 1990 and 2020. The ERT noted that GHG emissions from the energy sector and the transport sector are projected to increase by 7,758.57 kt CO₂ eq (39.2 per cent) and 2,985.37 kt CO₂ eq (29.1 per cent) above the 1990 level by 2020, respectively, partly explained by the build-up of the petroleum sector in the 1990s and the high economic and population growth in the mainland economy. The pattern of the total projected emissions reported for 2030 under the same scenario shows a moderately decreasing trend between 2020 and 2030, owing to an expected decrease in the extraction and processing of oil and gas, which is a principal driver affecting future trends in the energy sector in the period 2020–2030.

45. In 2020, the most significant reductions are projected for PFCs, SF₆ and N₂O emissions: 3,678.16 kt CO₂ eq (94.4 per cent), 2,027.72 kt CO₂ eq (96.6 per cent) and 1,681.01 kt CO₂ eq (59.4 per cent) between 1990 and 2020, respectively. Conversely, CO₂ emissions excluding LULUCF are expected to increase by 9,946.25 kt CO₂ eq (27.9 per cent) between 1990 and 2020.

46. The projected emission levels under the WEM scenario and Norway's quantified economy-wide emission reduction target are presented in the figure below.

Greenhouse gas emission projections by Norway



Sources: (1) Data for the years 1990–2013: Norway's 2015 annual inventory submission, version 1.0; total GHG emissions excluding land use, land-use change and forestry; (2) Data for the years 2014–2030: Norway's second biennial report; total GHG emissions excluding land use, land-use change and forestry.

Abbreviation: GHG = greenhouse gas.

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

47. In its BR2, Norway reported information on the provision of financial, technological and capacity-building support required under the Convention. The BR2 includes information on the national approach to tracking the provision of support, delivery mechanisms used and allocation channels tracked. Norway reported a description of the methodology used to report financial support, including underlying assumptions. The information provided in the BR2 demonstrates that Norway's financial support provided to Parties not included in Annex I to the Convention (non-Annex I Parties) has continued to grow since its NC6/BR1.

48. Norway provided information to show how its climate finance could be described as new and additional, and explained that its climate-related financing is considered as new and additional if it exceeds the indicative international development aid goal of 0.7 per cent of gross national income.

49. The ERT noted that, in its BR2, Norway provided general information on its national approach for tracking the provision of financial, technological and capacity-building support, without further elaboration on the underlying assumptions, methodologies and indicators, particularly taking into account the potential overestimation of financial support by using Rio Markers (see para. 51 below). The ERT reiterates the recommendation made in the technical review report of the BR1 that, to enhance transparency, the Party provide a detailed description of its national approach for tracking the provision of financial, technological and capacity-building support to non-Annex I Parties in its next BR.

50. Norway provided information in its BR2 on the differentiated support provided for adaptation and mitigation activities and recognizing the capacity-building elements of such support, and on its allocation channels and annual contributions for the period 2013–2014 without overlapping with the previous reporting period (2011–2012), as required by the UNFCCC reporting guidelines on BRs (see paras. 58 and 59 below). In addition, Norway stated that in cases where the support was targeting both mitigation and adaptation actions, it was allocated to the cross-cutting category in the CTF tables to avoid double counting.

51. Norway reported that climate change-related financial support is tracked by the Norwegian Agency for Development Cooperation (Norad), which uses official statistical data from Norwegian Aid Statistics. This information is based on the Development Assistance Committee of the Organisation for Economic Co-operation and Development reporting system, which utilizes the Rio Markers on climate change mitigation and adaptation. The Rio Markers allow an approximate quantification of financial flows that targets climate-related objectives by means of a scoring system with three values ('principal', 'significant' and 'not' objectives). Norway stated in the BR2 that its assessment did not distinguish between the 'principal' and 'significant' objective scores, which could lead to an overestimation of financial support; however, the Party believes that it still provides reasonably consistent and comparable information.

52. Further information on the Party's provision of financial, technological and capacity-building support to developing country Parties is provided in chapter 5 of the BR2 and in paragraphs 53–71 below.

1. Finance

53. In its BR2 and CTF tables 7, 7(a) and 7(b), Norway reported information on the provision of financial support required under the Convention, including on financial

support provided, allocation channels and annual contributions (see paras. 58 and 59 below, and table 5 below). The summary information was reported for 2013–2014.

54. The ERT noted that the information provided does not explicitly explain how the Party seeks to ensure that these resources effectively address the needs of developing country Parties with regard to climate change adaptation and mitigation, as required by the UNFCCC reporting guidelines on BRs, although it could be concluded that some areas of support entailed assessment of resource effectiveness (e.g. the results of a comprehensive evaluation of Norway's International Climate and Forest Initiative, as mentioned in chapter 6.2.1. of the BR2). The ERT therefore reiterates the recommendation made in the technical review report of the BR1, that the Party, in its next BR, provide a description, to the extent possible, of 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.

55. The ERT noted that in chapter 6 of the BR2 there is no information on the financial support Norway has committed and/or pledged for the purpose of assisting non-Annex I Parties to adapt to any economic and social consequences of response measures, where appropriate. However, in annex 3 to the BR2, Norway clarified that it has no such activities to report on. The ERT recommends that Norway include this information, or any changes to this information, in its next BR, in the chapter on financial support, in order to enhance the transparency of its reporting.

56. Norway reported in its BR2 on challenges to provide information on the private financial flows leveraged by bilateral climate finance directed towards mitigation and adaptation activities in non-Annex I Parties. During the review, in response to a question raised by the ERT, the Party provided additional information, elaborating on its efforts and studies to track private financial flows leveraged by public finances, as well as relevant actions that promote the scaling up of private investment in mitigation and adaptation activities in developing country Parties. The ERT encourages Norway to provide, in its next BR, to the extent possible, information on the progress made in tracking private financial flows and specific actions that promote the scaling up of private investment in mitigation and adaptation activities in developing country Parties, including the types of instruments used in the provision of assistance.

57. Norway provided brief information in the BR2 on its climate-related financial support that is targeting three priority areas in non-Annex I Parties, namely: the reduction of emissions from deforestation and forest degradation; the introduction of clean energy technologies; and the adaptation to climate change. The BR2 also gives an indication of benefits for the host countries arising from the projects implemented.

58. Norway reported on its climate-specific public financial support provided in 2013 and 2014, totalling USD 1,269.63 million in 2013 and USD 967.22 million in 2014. Norway did not provide information in its BR2 on future financial pledges aimed at enhancing the implementation of the Convention by developing country Parties. During the reporting period, Norway placed a particular emphasis on forested countries through its Climate and Forest Initiative, which is Norway's largest contribution to international climate action.

59. The BR2 includes detailed information on the financial support provided through multilateral channels, and bilateral and regional channels in 2013 and 2014. More specifically, Norway contributed through multilateral channels, as reported in its BR2 and in CTF table 7(a), USD 243.51 and 440.87 million for 2013 and 2014, respectively. Major parts of these contributions were made to financial institutions including regional development banks and United Nations bodies. The BR2 and CTF table 7(b) include detailed information on the total financial support provided through bilateral and regional and other channels (USD 1,026.12 and 526.35 million) in 2013 and 2014, respectively.

Table 5 includes some of the information reported by Norway on its provision of financial support.

Table 5

Summary of information on provision of financial support in 2013–2014 by Norway
(Millions of United States dollars)

<i>Allocation channel of public financial support</i>	<i>Years of disbursement</i>	
	<i>2013</i>	<i>2014</i>
Official development assistance ^a	5 399.65	5 924.82
Climate-specific contributions through multilateral channels, including:	243.51	440.87
Adaptation Fund	2.55	0
Trust Fund for Supplementary Activities	0	0.32
Financial institutions, including regional development banks	90.13	265.46
United Nations bodies	104.95	79.92
Other	45.87	95.17
Climate-specific contributions through bilateral, regional and other channels	1 026.12	526.35

^a *Source:* Query Wizard for International Development Statistics, available at <http://stats.oecd.org/qwids/>.

60. The BR2 provides information on the types of support provided. In terms of the focus of public financial support, as reported in CTF table 7 for 2013, the shares of total public financial support allocated for mitigation, adaptation and cross-cutting projects corresponding to these channels were 6.4, 0.5 and 93.1 per cent, respectively. 19.2 per cent of the total public financial support was allocated through multilateral channels and 80.8 per cent of it was through bilateral, regional and other channels. In 2014, the shares of total public financial support allocated for mitigation, adaptation and cross-cutting projects corresponding to these channels were 4.2, 0.3 and 95.5 per cent, respectively. 45.6 per cent of the total public financial support was allocated through multilateral channels and 54.4 per cent of it was through bilateral, regional and other channels.

61. The ERT noted that, in 2013, 6.9 per cent of the financial contributions made through multilateral channels was allocated to energy, 0.7 per cent to industry, 19.8 per cent to general environmental protection and the remaining 72.7 per cent to funding for activities that are cross-cutting across mitigation and adaptation, as reported in CTF table 7(a). The corresponding figures for 2014 were 6.6, 29.0 and 64.4 per cent for energy, general environmental protection and activities that are cross-cutting across mitigation and adaptation, respectively. Hence, most of the multilateral funding is being allocated to cross-cutting activities.

62. CTF tables 7(a) and 7(b) include information on the types of financial instrument used in the provision of assistance to developing countries. The ERT noted that the share of the grants in the total financial support provided was 100 per cent for both 2013 and 2014.

63. The ERT noted that Norway included some Parties included in Annex I to the Convention as recipient countries of its support in CTF table 7(b).

2. Technology development and transfer

64. In its BR2 and CTF table 8, Norway provided information on measures and activities related to technology transfer, access and deployment benefiting developing countries, including information on activities undertaken by the public and private sectors.

65. Norway did not provide information on measures, if any, that support development and enhancement of the endogenous capacities and technologies of non-Annex I Parties. The ERT reiterates the recommendation made in the report of the technical review of the BR1 that Norway, in its next BR, improve the completeness of its reporting by providing information on the measures that support the development and enhancement of their endogenous capacities and technologies.

66. The ERT noted that Norway reported on its active role in: being the major donor and supporter of the Climate and Technology Centre and Network (CTCN) under the Technology Mechanism of the Convention since it was launched in 2013; being a member of institutions and initiatives that have the exchange of research results and transfer of technology as a main target (e. g. the International Energy Agency and the Climate Technology Initiative); undertaking bilateral assistance projects and technology and research cooperation with a number of partner countries.

67. In its BR2, Norway did not provide information on success and failure stories related to technology transfer. The ERT encourages Norway to report on success and failure stories related to technology transfer referred to in paragraph 21 of the UNFCCC reporting guidelines on BRs.

3. Capacity-building

68. In its BR2 and CTF table 9, Norway supplied information on how it provided capacity-building support for mitigation, adaptation and technology that responds to the existing and emerging needs identified by non-Annex I Parties.

69. Norway reported that capacity-building support is primarily an integral part of the programmes and projects supported by the Norwegian Ministry of Foreign Affairs and Norad. A selection of measures related to capacity-building supported by Norway is provided in CTF table 9.

70. The BR2 and CTF table 9 include information describing a number of individual capacity-building measures and activities relating to adaptation, mitigation, food security and technology transfer (e.g. the UN-REDD Programme, the Forest Investment Programme and the Forest Carbon Partnership Facility).

71. In response to the recommendations made in the technical review report of the BR1 that the Party improve the completeness of information related to capacity-building support which responds to the existing and emerging capacity-building needs identified by non-Annex I Parties, Norway explained (in annex 3 to the BR2) that it provided information on only a few selected examples of capacity-building projects and programmes out of a large number of such projects implemented by Norway in non-Annex I Parties.

III. Conclusions

72. The ERT conducted a technical review of the information reported in the BR2 and the CTF tables of Norway in accordance with the UNFCCC reporting guidelines on BRs. The ERT concludes that the reported information is mostly in adherence with the UNFCCC reporting guidelines on BRs and provides an overview on: emissions and removals related to Norway's quantified economy-wide emission reduction target; assumptions, conditions

and methodologies related to the attainment of the target; progress made by Norway in achieving its target; and Norway's provision of support to developing countries.

73. Norway's total GHG emissions excluding LULUCF related to its quantified economy-wide emission reduction target were estimated to be 3.3 per cent above its 1990 level, whereas total GHG emissions including LULUCF are 33.5 per cent below its 1990 level for 2013. The emission increase was driven by the increase in activities related to oil and gas extraction and processing and in road transportation.

74. Under the Convention, Norway committed itself to achieving a quantified economy-wide emission reduction target of 30.0 per cent by 2020 below the 1990 level, which is consistent with its quantified emission limitation or reduction commitment of 84.0 per cent of the base year emissions for the years 2013–2020, as defined in the Doha Amendment to the Kyoto Protocol, which Norway ratified in 2014. This target covers the following GHGs: CO₂, CH₄, N₂O, HFCs, PFCs, SF₆ and NF₃, expressed using GWP values from the IPCC AR4 and covers all sources and sectors included in the annual GHG inventory. Emissions and removals from the LULUCF sector are included in the target and Norway reported that it plans to make use of market-based mechanisms to achieve its target.

75. Norway's main policy framework relating to climate change and energy is based on the "polluter-pays" principle, cost-effectiveness, technological development and innovation, and changes in consumer behaviour. In this regard, Norway has implemented several key legislative arrangements to reduce emissions of GHGs, such as the Pollution Control Act, the Greenhouse Gas Emissions Trading Act, the CO₂ Tax Act and the Petroleum Act, as well as requirements under the Planning and Building Act. Norway explained that it gives priority to the implementation of the carbon pricing instruments, which are the key overarching cross-sectoral mitigation actions reported in the BR2. These include taxes such as the CO₂ tax applied on mineral products, the base tax on mineral oil, the tax on HFCs and PFCs in products, as well as the inclusion of installations in the EU ETS. The BR2 indicates that, since 2013, emissions sources that contribute more than 80 per cent of domestic GHG emissions are covered either by the EU ETS or CO₂ taxation. In addition, electricity generation in Norway is almost exclusively from renewable energy sources, as over 95 per cent is produced by hydropower plants, which implies that a further increase in new renewable energy capacities and energy efficiency will have limited effects on the reduction of GHG emissions in Norway in the future.

76. For 2012, Norway reported in CTF table 4 total GHG emissions excluding LULUCF at 52,757.24 kt CO₂ eq, or 1.4 per cent above the 1990 level. Norway reported on its use of the units from market-based mechanisms and on the contribution of LULUCF to achieve its target. This information was provided for the period 2008–2012. The Party reported information on units surrendered by the installations in Norway that are covered by the EU ETS, and transferred to its retirement account in the registry in the period 2009–2012. The GHG emission projections provided by Norway in its BR2 include the WEM scenario, under which emissions are projected to be 5.4 per cent above the 1990 level in 2020.

77. On the basis of this information, the ERT concluded that Norway is making progress towards its emission reduction target; however, it may face challenges in the achievement of its target under the Convention and the Kyoto Protocol, and would need to further strengthen domestic mitigation actions and/or acquire units from market-based mechanisms in the period 2013–2020. In this regard, Norway reported in its BR2 that it is in the process of purchasing approximately 60 million units from market-based mechanisms, which should be delivered in the aforementioned period.

78. Norway continues to allocate climate financing mainly through multilateral financial institutions including regional development banks in order to assist developing country Parties to implement the Convention. It has increased its contributions by 68.0 per cent

since its NC6/BR1 (cumulative contribution in 2013 and 2014 compared to 2011 and 2012 in current prices). Its public financial support in 2013 and 2014 totalled USD 1,269.63 and 967.22 million per year, respectively. For these years, Norway's financial support provided was almost exclusively indicated as cross-cutting actions (93.1 per cent in 2013 and 95.5 per cent in 2014). With regard to technology transfer and capacity-building support for non-Annex I Parties, Norway reported on its active role in the CTCN under the Technology Mechanism of the Convention, as well as in providing bilateral assistance support that entails both technology transfer and capacity-building components. This integrated approach ensures the development and implementation of sustainable technological solutions that are adapted to their specific circumstances.

79. In the course of the review, the ERT formulated the following recommendations for Norway to improve its adherence to the UNFCCC reporting guidelines on BRs in its next BR:⁴

- (a) Improve the completeness of its reporting by:
 - (i) Providing information on the entire scope of its mitigation actions, that is, those that are in implementation and planned to be implemented, including new PaMs that might have been introduced in the period since the submission of its latest BR (see para. 19 above);
 - (ii) Providing a description 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 (see para. 54 above);
 - (iii) Providing information on the measures that support the development and enhancement of the endogenous capacities and technologies of non-Annex I Parties (see para. 65 above);
- (b) Improve the transparency of its reporting by:
 - (i) Providing additional information related to assumptions and conditions for the attainment of its quantified economy-wide emission reduction target (see para. 15 above);
 - (ii) Estimating the impacts of the mitigation actions that are not reported in CTF table 3, or providing a detailed explanation of why those impacts could not be estimated (see para. 20 above);
 - (iii) Providing information on emission projections related to fuel sold to ships and aircraft engaged in international transport (see para. 37 above);
 - (iv) Providing a detailed description of its national approach for tracking the provision of financial, technological and capacity-building support to non-Annex I Parties (see para. 49 above);
 - (v) Including update of information given in annex 3 of the BR2 on the financial support committed and/or pledged for the purpose of assisting non-Annex I Parties to adapt to any economic and social consequences of response measures, in the chapter on financial support (see para. 55 above).

⁴ The recommendations are given in full in the relevant chapters 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 preparation of national communications by Parties included in Annex I to the Convention, Part I: UNFCCC reporting guidelines on annual greenhouse gas inventories”. Annex to decision 24/CP.19. Available at

<<http://unfccc.int/resource/docs/2013/cop19/eng/10a03.pdf#page=2>>.

“Guidelines for the preparation of national communications by Parties included in Annex I to the Convention, Part II: UNFCCC reporting guidelines on national communications”.

FCCC/CP/1999/7. Available at <<http://unfccc.int/resource/docs/cop5/07.pdf>>.

“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 13/CP.20. Available at

<<http://unfccc.int/resource/docs/2014/cop20/eng/10a03.pdf>>.

FCCC/ARR/2014/NOR. Report on the individual review of the annual submission of Norway submitted in 2014. Available at <<http://unfccc.int/resource/docs/2015/arr/nor.pdf>>.

FCCC/IDR.6/NOR. Report of the technical review of the sixth national communication of Norway. Available at <<http://unfccc.int/resource/docs/2015/idr/nor06.pdf>>.

FCCC/TRR.1/NOR. Report of the technical review of the first biennial report of Norway. Available at <<http://unfccc.int/resource/docs/2015/trr/nor01.pdf>>.

2015 greenhouse gas inventory submission of Norway. Available at <http://unfccc.int/national_reports/annex_i_ghg_inventories/national_inventories_submissions/items/8812.php>.

Sixth national communication of Norway. Available at

<http://unfccc.int/files/national_reports/annex_i_natcom/submitted_natcom/application/pdf/nc6_nor_resubmission.pdf>.

First biennial report of Norway. Available at

<http://unfccc.int/files/national_reports/annex_i_natcom/submitted_natcom/application/pdf/nc6_nor_resubmission.pdf>.

Common tabular format tables of the first biennial report of Norway. Available at

<http://unfccc.int/files/national_reports/biennial_reports_and_iar/submitted_biennial_reports/application/pdf/nor_2014_v2.0_resubmission.pdf>.

Second biennial report of Norway. Available at

<http://unfccc.int/files/national_reports/biennial_reports_and_iar/submitted_biennial_reports/application/pdf/br2_norway.pdf>.

Common tabular format tables of the second biennial report of Norway. Available at

<http://unfccc.int/files/national_reports/biennial_reports_and_iar/submitted_biennial_reports/application/pdf/nor_2016_v2_0-new_submission_formatted.pdf>.

B. Additional information used during the review

Responses to questions during the review were received from Ms. Ragnhild Marie Falkenberg Valstad (Ministry of Climate and Environment), including additional material and the following documents¹ provided by Norway:

Norwegian Ministry of Climate and Environment, 2015. *New emission commitment for Norway for 2030 – towards joint fulfilment with the EU*, White Paper, Report to the Storting 13, Oslo. Available at <<https://www.regjeringen.no/en/dokumenter/meld.-st.-13-20142015/id2394579/?ch=1&q=>>>.

Ministry of Petroleum and Energy, 2014, *The Government's carbon capture and storage strategy* <<https://www.regjeringen.no/en/topics/energy/carbon-capture-and-storage/the-governments-carbon-capture-and-storage-strategy/id2353948/>>>.

Norwegian Environment Agency, the Norwegian Agricultural Authority, and the Norwegian Institute of Bioeconomy Research (then the Norwegian Institute of Forests and Landscape), 2014, *Målrettet gjødsling av skog som klimatiltak, egnede arealer og miljøkriterier* (Targeted fertilisation of forest for mitigation of climate change. Suitable areas and environmental criteria), M174 Oslo. <<http://www.miljodirektoratet.no/Documents/publikasjoner/M174/M174.pdf>>.

Norwegian Climate and Pollution Agency. 2010. *Clima-cure 2020 – Measures and instruments for achieving Norwegian climate goals by 2020*, TA 2678/2010, Oslo. Available at <<http://www.miljodirektoratet.no/no/Tema/klima/Klimakur-2020/>>>.

Ministry of Climate and Environment. April 2012. *Meld. St. 21 (2011 – 2012) Melding til Stortinget Norsk klimapolitikk* Tilråding fra Miljøverndepartementet 25. April 2012, godkjent i statsråd samme dag. (Regjeringen Stoltenberg II) (New White Paper “Norwegian Climate Policy”). Oslo. Available at <<https://www.regjeringen.no/nb/dokumenter/meld-st-21-2011-2012/id679374/>>>.

Green Tax Commission, December 2015, *Environmental Pricing (Summary)*, NOU15:15, Oslo. Available at <<https://www.regjeringen.no/en/dokumenter/nou-2015-15/id2465882/>>>.

¹ Reproduced as received from the Party.