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Report of the technical review of the first biennial report of the European Union

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 the European Union 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 the European Union (EU), the Convention entered into force on 21 March 1994. Under the Convention, the EU and its member States made a commitment to reduce its greenhouse gas (GHG) emissions by 20 per cent by 2020 below 1990 levels, with an offer to move to a 30 per cent reduction conditional on other developed countries committing to a comparable target and developing countries contributing adequately under a new global climate change agreement.
2. This report covers the in-country technical review of the first biennial report (BR1)¹ of the EU, coordinated by the secretariat, in accordance with the “Guidelines for the technical review of information reported under the Convention related to greenhouse gas inventories, biennial reports and national communications by Parties included in Annex I to the Convention” (decision 23/CP.19).
3. The review took place from 24 to 29 March 2014 in Brussels, Belgium, and was conducted by the following team of nominated experts from the UNFCCC roster of experts: Mr. Takeshi Enoki (Japan), Mr. Mikhail Gitarskiy (Russian Federation), Ms. Alexa Nicole Kleysteuber (Chile), Mr. Elan Strait (United States of America) and Mr. Hongwei Yang (China). Mr. Yang and Mr. Enoki were the lead reviewers. The review was coordinated by Mr. Daniel Hooper and Ms. Ruta Bubniene (secretariat).
4. During the review, the expert review team (ERT) examined each section of the BR1.
5. In accordance with decision 23/CP.19, a draft version of this report was communicated to the EU, which provided comments that were considered and incorporated with revisions, as appropriate, in this final version of the report.

B. Summary

6. The ERT conducted a technical review of the information reported in the BR1 of the EU according to the “UNFCCC biennial reporting guidelines for developed country Parties” (hereinafter referred to as the UNFCCC reporting guidelines on BRs).
7. During the review, the EU provided further relevant information on:
 - (a) The quantified economy-wide emission reduction target, including the effort-sharing decision (ESD) for member States;
 - (b) The role of the new Monitoring Mechanism Regulation (MMR) in evaluating policies and measures (PaMs) and tracking member State progress in meeting their emissions reduction targets;
 - (c) The cumulative and individual effects of PaMs;
 - (d) How funds were determined as “new and additional”;
 - (e) Methods for tracking climate finance;

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 have been subject to the technical review.

(f) Financial support for assisting Parties not included in Annex I to the Convention (non-Annex I Parties) in adapting to the economic and social consequences of response measures;

(g) The policy dialogue process, including the frequency of the meetings and the personnel who participate, and how these processes translate into meeting the needs of non-Annex I Parties;

(h) Efforts to promote endogenous capacities in non-Annex I Parties.

1. Completeness and transparency of reporting

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

2. Timeliness

9. The BR1 was submitted on 13 January 2014, after the deadline of 1 January 2014 mandated by decision 2/CP.17. The common tabular format (CTF) tables were submitted on 15 January 2014 for the EU-15² and 13 January 2014 and for the EU-28.³ During the review, the EU explained that relevant biennial report (BR) documents need to be adopted as a European Commission decision and translated into all EU languages before submission to the secretariat. These procedural steps led to a delay in the submission beyond the deadline of 1 January 2014. The ERT noted the delay in the submission of the BR1 and CTF tables.

10. The EU submitted revised BR1 CTF tables for the EU-28 on 10 April 2014 in response to questions raised by the ERT during the review.

3. Adherence to the reporting guidelines

11. The information reported by the EU in its BR1 is mostly in adherence to 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 the European Union^a

<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	Mostly transparent	30
Provision of support to developing country	Mostly complete	Mostly Transparent	36, 38, 48,

² The 15 member States that formed the European Community (EU-15) at the time of ratification of the Kyoto Protocol are as follows: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden and United Kingdom of Great Britain and Northern Ireland.

³ The 28 member States of the EU-28 include the EU-15 and the following countries: Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia and Slovenia.

<i>Sections of the biennial report</i>	<i>Completeness</i>	<i>Transparency</i>	<i>Reference to paragraphs</i>
Parties			49

^a 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. The EU has provided a summary of information on GHG emission trends for the period 1990–2011 in its BR1 and CTF table 1. The GHG data presented in the sixth national communication (NC6)/BR1 for the EU-15 are consistent with the 2013 national GHG inventory resubmission on 18 November 2013. The GHG data presented for the EU-28 are the aggregate of data from the EU-15 (resubmission on 18 November 2013), the EU-12⁴ (which is part of the EU-27⁵ 2013 national GHG inventory resubmission on 27 May 2013) and Croatia (2013 national GHG inventory resubmission on 4 November 2013). The inclusion of Croatia in the GHG data for the EU-28 reflects the enlargement of the EU from 27 member States to 28 member States as of 1 July 2013. As the 2013 EU national GHG inventory was submitted prior to this enlargement, it covers the EU-27 only. However, at the date of submission of the NC6, the EU comprised 28 member States; the EU GHG inventory submission in 2014 includes data for the EU-28.

13. For the EU-28, total GHG emissions⁶ excluding emissions and removals from land use, land-use change and forestry (LULUCF) decreased by 18.3 per cent between 1990 and 2011, whereas total GHG emissions including net emissions or removals from LULUCF decreased by 19.9 per cent over the same period. This decrease in total GHG emissions was mainly attributed to carbon dioxide (CO₂) emissions (constituting 82.2 per cent of total GHG emissions in 2011), which decreased by 15.0 per cent over this period. Over the same period, emissions of methane (CH₄) decreased by 35.0 per cent, while emissions of nitrous oxide (N₂O) decreased by 35.7 per cent. These decreases were mainly driven by (a) fossil fuel switching and better energy efficiency in the manufacturing industries and construction sector, as well as the public electricity and heat production sector (CO₂); (b) reductions in managed waste disposal on land mainly caused by the increased use of recycling and incineration of waste with energy recovery, reductions in coal mining, and a decrease in cattle production (CH₄); and (c) emission reduction measures in adipic acid production and nitric acid production, as well as decreased use of fertilizer and manure on agricultural soils (direct and indirect soil emissions) (N₂O).

14. 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).

⁴ The EU-12 includes Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia and Slovenia.

⁵ The EU-27 is the member States included in the EU-28 minus Croatia, which joined in July 2013.

⁶ 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.

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

15. In its BR1 and CTF tables 2(a) – 2(f), the EU reported a description of its target under the Convention, including associated conditions and assumptions. The EU and its member States communicated an independent quantified economy-wide emission reduction target of a 20 per cent emissions reduction by 2020 below the 1990 level, with an offer to move to a 30 per cent reduction conditional on other developed countries committing to a comparable target and developing countries contributing adequately under a new global climate change agreement. The joint EU-28 target is implemented through binding legislation known as the climate and energy package, which was adopted in 2009. This legislative package regulates emissions of CO₂, CH₄, N₂O, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF₆) using global warming potentials from the Fourth Assessment Report of the Intergovernmental Panel on Climate Change to aggregate EU GHG emissions up to 2020.

16. Major measures to achieve the 2020 target as identified in the climate and energy package include the European Union Emissions Trading System (EU ETS) phase three; implementation of the ESD for the sectors not covered under the EU ETS; renewable energies and energy efficiency legislation (the provision of 20 per cent energy supply from renewable sources and an increase in energy efficiency by 20 per cent by 2020); legislative proposals on 2020 targets for CO₂ from cars and vans; and review of fluorinated gases (F-gases). Efforts to meet the EU-28 target will be divided among member States in both EU ETS and non-ETS sectors as follows: (1) a 21 per cent reduction by 2020 compared with 2005 in EU ETS sector emissions; and (2) a 10 per cent reduction by 2020 compared with 2005 under the ESD for the sectors that are not covered by the EU ETS. The EU ETS, which sets an overall EU emissions cap for relevant sectors, covers more than 12,000 power plants and manufacturing installations in the EU-28 member States, Iceland, Norway and Liechtenstein. In addition, since 2012, aviation emissions from flights within the EU and participating countries are included in the EU ETS. The ESD mainly covers emissions from transportation, buildings, small businesses and services, agriculture and waste, and sets yearly individual targets at the level of each member State for the period 2013–2020.

17. The climate and energy package allows certified emission reductions (CERs) and emission reduction units (ERUs) to be used for compliance purposes, subject to a number of restrictions, including a limit of 50 per cent of the required reduction below the 2005 level for those sectors under the EU ETS. Under the Convention target for the EU-28, emissions and removals from the LULUCF sector are excluded in the non-ETS sector efforts under the ESD. In response to a request by the ERT, the EU provided additional information⁷ during the review, which elaborated on how the non-ETS portion of the 2020 emission reduction target is divided among the member States and the progress made towards achieving the target. Due to the complexity and uniqueness of the EU target and its compliance system, the ERT encourages the EU to include additional summary information presenting a more transparent representation and description of the target, including the breakdown of the target by member States.

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

18. In its BR1 and CTF tables 3 and 4, the EU reported information on its mitigation actions implemented and planned since its fifth national communication (NC5) to achieve

⁷ The EU provided two background documents, details of which are given in the annex.

its target. The EU also reported on the use of units from market-based mechanisms and LULUCF.

19. Under the ‘with measures’ (WEM) scenario, total GHG emissions (excluding international aviation) are projected to be 22.2 per cent lower in 2020 than in 1990 and 24.4 per cent lower in 2030 than in 1990. Under the ‘with additional measures’ (WAM) scenario, total GHG emissions (excluding international aviation) are projected to be 25.9 per cent lower in 2020 than in 1990 and 30.0 per cent lower in 2030 than in 1990. The GHG inventory data and reported projections in the BR1 suggest that the EU-28 is collectively on track to achieve its 2020 targets.

20. During the review, the EU presented the progress individual member States are making in achieving their portions of the joint 2020 target. The ERT encourages the EU to provide more information on the monitoring of the progress of member States in achieving their targets in its next BR.

1. Mitigation actions and their effects

21. The EU has provided in its BR1 well-organized information on its package of mitigation actions introduced to achieve its target. This information is organized by sector and by gas. A detailed review of the reported information is provided in chapter II.B of the IDR/NC6. Information on the EU’s mitigation actions and their effects relating to the progress in achievement of the quantified economy-wide emission reduction target is outlined in CTF table 3 of the BR1. The information reported in CTF table 3 is mostly complete, as the quantitative estimates of mitigation impacts were not provided for all actions and years (2010, 2015, 2020, 2025 and 2030). The ERT encourages the EU to report on the effects of all its mitigation actions for all years.

22. Climate policy is integrated in the EU sustainable development agenda and is organized as general development strategies as well as cross-sectoral and sector-specific mitigation actions. The general strategies establish basic objectives for socioeconomic development of the EU, which include climate and energy goals: a 20 per cent decrease in GHG emissions compared with 1990, the provision of 20 per cent energy supply from renewable sources, and an increase in energy efficiency by 20 per cent by 2020.

23. The overarching cross-sectoral mitigation actions in the EU include the EU ETS and the ESD. The EU ETS is a cap-and-trade system that covers all significant energy-intensive installations, which comprise 40–45 per cent of the GHG emissions in the EU. The ESD covers sectors outside of the EU ETS, including transport (excluding aviation and international maritime transport), residential and commercial buildings, agriculture, waste and other sectors, together accounting for 55–60 per cent of GHG emissions in the EU. The ESD is aimed at decreasing GHG emissions in the EU by 10 per cent below 2005 levels by 2020, and includes annual binding targets at the level of each member State for 2013–2020, which are underpinned by the national policies and actions of the member States. The Carbon Capture and Storage Directive, the Clean Air Policy Package, the Structural Funds and the Cohesion Fund provide additional support for decision-making and implementation of specific activities at the member State level.

24. The general strategy and cross-sectoral mitigation actions are supplemented with sector-specific actions set at the EU level and implemented at the member State level. The ERT noted that the majority of mitigation actions are ongoing or have been updated to reflect consistency in the EU’s climate policy. Cross references between the ongoing mitigation actions and previous mitigation actions have been made, increasing the transparency of the BR1.

25. The ERT noted that most of the mitigation actions described in the BR1 are coordinated at the EU level and are legally binding (i.e. regulations and directives). During

the review, the EU explained that its member States identify and choose the methods of implementation of these mitigation actions at the domestic level (provincial, regional and local) subject to their national circumstances. The EU has established institutional arrangements and procedures that enable continuous monitoring and assessment of the progress made at the member State level regarding implementation of the mitigation actions. These include impact assessments performed for various economic sectors and the MMR. The progress of implementation is continuously monitored and evaluated during the European Semester, which is an annual policy coordination exercise, and under the MMR. Table 2 provides a concise summary of the key mitigation actions implemented by the EU to achieve its target.

Table 2

Summary of information on mitigation actions reported by the European Union

<i>Sectors affected</i>	<i>List of key mitigation actions</i>	<i>Estimate of mitigation impact (kt CO₂ eq) 2010/2020</i>
<i>Policy framework and cross-sectoral measures</i>	LIFE+ package (1992)	NA
	Structural Funds and Cohesion Fund (1994)	NA
	European Climate Change Programme II (2005)	NA
	European Union Emissions Trading System (2005)	NA
	European Union Sustainable Development Strategy (2006)	NA
	Carbon Capture and Storage Directive (2009)	NP
	Europe 2020 strategy (2011)	NA
	Roadmap 2050 package (2011)	NA
	7th Environment Action Programme (2013)	NA
	Clean Air Policy Package (2013)	NA
Effort sharing decision (2013)	NA	
<i>Energy</i>	Cogeneration Directive (2006)	33 000/NP
	Climate and Energy Package (2009)	NA
	Intelligent Energy Europe II Programme (2013)	NA
	Energy supply	
	Taxation of energy products and electricity (2003)	NA
	Internal Market in Electricity Directive (2011)	NA
	Renewable energy	
	Renewable energy roadmap and directive (2009, 2010)	NA/750 000
	Energy efficiency	
	European Motor Challenge Programme (2003)	NA
Energy End-use Efficiency and Energy Services Directive (2008)	NA	
	Eco-design Framework Directive (2009)	NP/366 300
	Energy Labelling Directive (2010)	NA
	Energy Efficiency Plan and Directive (2011, 2014)	NA/740 000
Residential and commercial sectors	Energy Performance on Buildings Directive (2012)	NA/185 000
<i>Transport</i>	Strategy to reduce CO ₂ from light vehicles (2007)	NA
	Euro 5 and 6 standards (2009)	NP/2 000

<i>Sectors affected</i>	<i>List of key mitigation actions</i>	<i>Estimate of mitigation impact (kt CO₂ eq) 2010/2020</i>
	Regulation on CO ₂ emissions from cars (2009)	NP/24 900
	Regulation on CO ₂ emissions from vans (2011)	NA/1 900
	Tyre labelling and minimum rolling resistance regulation (2000)	NP/2 750
	Fuel Quality Directive (2010)	NA/55 000
	Clean Vehicles Directive (2010)	NA/NP
	European Bio-economy strategy (2012)	NA
	Euro VI standard for heavy duty vehicles (2013)	NA
Industrial sectors	F-gas Regulation (2006)	NP/33 000
	Emissions from air conditioning systems in motor vehicles (2006)	NP/13 000
	Eco-design Framework Directive (2009)	NA
	Industrial Emission Directive (2011)	NA
Agriculture	Common Agricultural Policy	NP
	Rural Development Policy	
	Soil Thematic Strategy	
	Nitrates Directive	
Forestry	EU Forest Strategy	NP
	Rural development policy	
	Land use, land-use change and forestry accounting	
Waste management	Waste Framework Directive (1975, 2008)	NP/40 100
	EU policies targeting waste streams (1994–2012)	NA
	Urban Waste Water Directive (1991)	NA
	Landfill Directive (1999)	48 000/44 000
	Waste Incineration Directive (2000)	NA
	Management of biodegradable waste	NP

Note: The greenhouse gas reduction estimates, given for some measures are reductions in carbon dioxide or carbon dioxide equivalent for 2010 and 2020.

Abbreviations: NA = not applicable (i.e. Party reported that the direct mitigation impact cannot be estimated), NP = not provided.

26. In its BR1, the EU provided information on changes in its domestic institutional arrangements, including institutional, legal, administrative and procedural arrangements used for domestic compliance, monitoring, reporting, archiving of information and evaluation of the progress towards its target. These include:

(a) Expansion of the EU ETS to include aircraft operations (2012), N₂O from chemical industries, PFCs from aluminium production and CO₂ from industrial processes (2013), and the start of the third phase of the EU ETS, with an annual linear reduction factor of 1.74 per cent (2013);

(b) Operationalization of the ESD (2013);

(c) Implementation of the MMR (2013).

27. The EU provided, to the extent possible, detailed information on the assessment of the economic and social consequences of response measures. In the EU, a wide-ranging impact assessment system accompanying all new policy initiatives has been established. It is based on an integrated approach which analyses both benefits and costs, and addresses all significant economic, social and environmental impacts of possible new initiatives.

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

28. The EU reported in its BR1 and CTF table 4 on its plans to use market-based mechanisms under the Convention and other mechanisms and on the contribution from LULUCF. Table 3 illustrates how the EU reported on the use of units from market-based mechanisms and LULUCF to achieve its target.

Table 3

Summary information on the use of units from market-based mechanisms and land use, land-use change and forestry as part of the reporting on the progress made towards achievement of the target by the EU-28

Year	Emissions excluding LULUCF (kt CO ₂ eq)	LULUCF emissions/removals (kt CO ₂ eq) ^c	Emissions including LULUCF (kt CO ₂ eq)	Use of units from the market-based mechanisms (kt CO ₂ eq) ^b
Base year				
1990 ^c	5 791 121.99	NA	NA	NA
2010	4 733 815.65	NA	NA	2 258 546.75
2011	4 578 468.64	NA	NA	2 761 334.89
2012	NA	NA	NA	2 315 900.57

Note: The European Union (EU), in common tabular format table 4, reported a contribution from the LULUCF sector of –83,976.59 kt CO₂ eq in 2010, 2011 and 2012 as part of information on progress made towards the target. The expert review team did not include these values in the above table as the EU unconditional commitment to reduce greenhouse gas emissions by 20 per cent by 2020 compared with 1990 does not include emissions/removals from LULUCF.

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

^a Average projected accounting of activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol.

^b The information comes from the page 404 of the biennial report “table (BR1) 4–10 Annual quantities of units which have been included in the retirement account of EU Member States”. The figures are the yearly sum of assigned amount units, emission reduction units, removal units, certified emission reductions, temporary certified emission reductions and long-term certified emission reductions. In total it represents the amount of units from market-based mechanisms that have been included in the retirement account of each member State (registry).

^c Emissions and removals for 1990 shall be reported, if a base year other than 1990 is used.

3. Projections

29. The EU has provided in its BR1 and CTF tables 5 and 6 comprehensive information on its updated projections for 2020 and 2030. A detailed review of the reported information is provided in chapter I.I.C of the IDR/NC6.

30. The ERT noted that aviation emissions between the EU and three countries not belonging to the EU (Norway, Iceland and Liechtenstein) are included under the EU ETS, though some of these flights are considered international aviation in terms of GHG accounting rules. The ERT recommends that the EU present the contribution of international aviation to its projections separately, in line with the “Guidelines for the preparation of national communications by Parties included in Annex I to the Convention,

Part I: UNFCCC reporting guidelines on annual inventories” (hereinafter referred to as UNFCCC Annex I inventory reporting guidelines).

31. In its BR1, the EU provided information on the changes since the previous national communication (NC) in the methodologies used for the preparation of projections. Following the recommendations from the IDR/NC5, the EU included explanations on the methodologies used for the aggregation of projections by member States. To address emission trends where data from some member States are missing for certain time periods for the WEM scenario (e.g. if national projections only covered the period up to 2020), or in the event of a new member State, such as Croatia, the EU-28 2013 climate policy ‘baseline with adopted measures’ scenario is used for gap-filling purposes. The gap-filling technique was also used by the EU to compile an aggregated data set for the EU-28 because not all member States reported a WAM scenario. A detailed explanation of the gap-filling technique is provided in section 5.4.1 of the BR1 as an annex to the NC6.

32. The ERT noted information reported by the EU on projected emission trends by 2020. According to the reported information for the EU-28, the total GHG emissions (excluding international aviation) are projected to be 22.2 per cent lower in 2020 than in 1990 under the WEM scenario, while the target is 20 per cent below 1990. Under the WAM scenario, total GHG emissions (excluding international aviation) are projected to be 25.9 per cent lower in 2020 than in 1990. The reported projections in the BR1 suggest that the EU-28 is collectively on track to achieve its 2020 targets.

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

1. Provision of financial support to developing country Parties

33. In its BR1, the EU reported information on the provision of financial, technological and capacity-building support required under the Convention. Information on provision of financial, technological and capacity-building support by the EU’s member States can be found in their respective biennial reports. The EU reported that in 2011 and 2012 it committed USD 1.82 billion in financial assistance, all of which was classified as official development assistance (ODA). In 2011 and 2012, support provided to mitigation was higher than support provided to adaptation, but the gap narrowed substantially in 2012.

34. In its BR1, all cooperation by the EU is considered to be bilateral, even when the EU partners use a multilateral organization as a delivery instrument. Therefore, the EU reported that it has not provided core contributions to multilateral organizations, including to the operating entities of the financial mechanism (the Global Environment Facility and the Green Climate Fund). The EU’s contributions to the UNFCCC and its Kyoto Protocol are included in the NC6. The EU has reported in CTF table 7(b) on all of its assistance through bilateral channels.

35. The BR1 indicates that the highest level of support goes to cross-cutting projects, which impact more than one sector, followed by support to the energy and agriculture sectors. Support for the forestry sector has remained at a relatively high level. During the reporting period, the EU placed a particular regional focus on Africa, where it committed USD 768 million. Asia received the second highest amount of support at USD 255 million.

36. The BR1 does not include information required by the UNFCCC reporting guidelines on BRs on how the EU supports non-Annex I Parties in adapting to the economic and social consequences of response measures. During the review, the EU indicated that its support is demand-driven and country-owned, and so far none of its developing country partners has requested support for adapting to the social and economic

consequences of response measures. The ERT recommends that the EU include this information in its next BR, as well as to consider whether any of its capacity-building activities may directly or indirectly assist developing country Parties in adapting to the social and economic consequences of response measures.

37. In its original BR1 and CTF submission, the EU did not complete CTF tables 7a, 8 and 9, although a textual explanation for not completing them was provided in the BR1. During the review, the ERT highlighted that completion of these CTF tables would increase the completeness and transparency of the EU reporting. Within two weeks of the review, on 10 April 2014, the EU submitted these revised CTF tables.

38. In its BR1, the EU provided details on what “new and additional” financial resources it has provided. The EU defines “new and additional” financial resources as any resources that were committed after its NC5 reporting period (i.e. since 2008). However, the EU did not include a clear explanation of how it determined that the funds committed since the NC5 were “new and additional”. During the review, the EU provided detailed information on how it determines its resources as being “new and additional”. Specifically, the EU stated that since EU budgets are determined on an annual basis, each annual commitment cycle represents “new and additional” resources. The financial support reported in the BR1 concerns these annual commitments from 2011 to 2012. The ERT recommends the EU to include this information in its next NC/BR.

39. The EU described how its resources address the adaptation and mitigation needs of non-Annex I Parties through its policy dialogue framework and by basing its programming on the partner country or region’s own strategy documents (e.g. national allocation plans, national adaptation programmes of action, nationally appropriate mitigation actions) to the extent possible. During the review, the EU also provided additional information on its policy dialogue process, including the frequency of the meetings and the personnel who participate. The ERT encourages the EU to include this information in its next BR, as well as to provide additional information on how these processes are translated into programming and financial commitments that meet the needs of developing country Parties.

40. In its BR1, the EU provided information on private financial flows, including the regional blending mechanism, which allows the use of grant funding to leverage financing from other various sources. However, the EU did not provide information on how much private finance was leveraged by its efforts to mobilize finance towards mitigation and adaptation activities in non-Annex I Parties. For completeness of reporting, the ERT encourages the EU to include this information in its next BR.

41. Table 4 includes some of the information reported by the EU on its provision of financial support.

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

<i>Allocation channel of public financial support</i>	<i>Years of disbursement</i>	
	<i>2011</i>	<i>2012</i>
Climate-specific contributions through bilateral, regional and other channels	873 952 746	943 113 817

2. Approach used to track support provided

42. In its BR1, the EU reported its total support provided as USD 873.95 million in 2011 and USD 943.11 million in 2012. Together, the total support provided in the biennial reporting period was USD 1.82 billion. When compared with the total support provided in

the previous biennial period (2009–2010) of USD 1.76 billion, this represents an increase of 3.4 per cent. In 2011 and 2012, support provided to mitigation was higher than support provided to adaptation; however, this gap narrowed substantially in 2012 and amounts were almost equal in 2012. The EU tracks finance at a ‘committed’ level, which it defines as the point at which a “final decision has been taken on allocation of the funds to a specific project or program”. The EU clarified that only in rare cases does disbursement or expenditure not follow commitment.

43. To track financial flows, the EU uses the Rio marker system developed by the Organisation for Economic Co-operation and Development. The EU acknowledges that the Rio markers are intended for policymakers, and not originally intended to accurately track the flows of finance. Therefore, the EU undertakes an additional step to translate the markers into estimated flows. Specifically, the EU marks an activity as 100 per cent support if it is marked as ‘principal’ mitigation or adaptation, and 40 per cent support if it is ‘significant’ mitigation or adaptation. This method helps to avoid over counting flows. However, an activity can be marked as ‘principal’ mitigation and ‘significant’ adaptation (or vice versa), which results in a somewhat misleading reporting of assistance, in particular in table 6-2 and table 6-3 of the BR1. For example, total mitigation assistance in 2012 was reported as USD 712 million and total adaptation assistance was reported as USD 710 million, while the total support (which normally would be the sum of these figures) was USD 943 million. The ERT commends the EU for not double counting totals in the total support row. Nevertheless, the EU may consider methods of counting and reporting flows for mitigation and adaptation that avoid the appearance of over counting.

44. In its NC6/BR1, the EU did not provide a transparent description as to why 40 per cent was assigned to ‘significant’ flows. During the review, the EU provided additional information on how activities are determined to be ‘significant’, and included examples of such ‘significant’ activities. The ERT encourages the EU to include its rationale for the 40 per cent designation in its next BR.

45. With regard to the most recent financial contributions, particularly those under fast-start finance, to enhance the implementation of the Convention by developing country Parties, the EU has committed USD 2.6 billion during the years 2010 to 2012.

3. Technology development and transfer

46. In its BR1, the EU provides textual information on activities related to the transfer of technology to developing countries. While the BR1 does briefly describe some of the programmes and initiatives that the EU supports and may lead to technology transfer activities (e.g. Climate Technology Centre and Network, Seventh Framework Programme for research and technological development, European Strategic Energy Technology Plan, Near-zero Emissions Power Generation Technology through Carbon Dioxide Capture and Storage project), it does not include details on specific measures related to the promotion, facilitation and financing of the transfer of, or access to, environmentally sound technologies.

47. The BR1 and the original submission of CTF table 8 did not include information required by the UNFCCC reporting guidelines on BRs pertaining to the target area of mitigation or adaptation, the sectors involved, the sources of technology transfer from the public and private sectors, and distinguishing between activities undertaken by the public and private sectors. The EU did, however, provide a textual explanation in the BR1 that “it is in most cases impossible, within a given programme, to get a breakdown of the technology transfer activities and related financial resources”.

48. In response to requests by the ERT, the EU submitted revised CTF tables within two weeks of the review (on 10 April 2014), including CTF table 8 on the provision of

technology development and transfer support. The revised CTF table 8 includes information on the targeted area of mitigation and/or adaptation, the sector or sectors involved, and the source of funding for the technology transfer (public and/or private). However, the revised CTF table 8 does not include information on the recipient countries (except for one example involving a carbon capture and storage project in China). In addition, a footnote in CTF table 8 states “This table is purely illustrative and is not a comprehensive list of technology transfer activities”. Therefore, the ERT recommends the EU to include this information in its next BR and/or CTF tables in order to increase the completeness of its reporting.

49. In its BR1, the EU did not provide information on measures for the support of the development and enhancement of endogenous capacities and technologies of non-Annex I Parties. During the review, the EU elaborated on a number of efforts to develop and enhance endogenous capacities and technologies of non-Annex I Parties, such as the CAAST-Net project, which helps the integration of scientists and research institutes from countries outside the EU into the European Research Area. The ERT recommends that the EU provide this information, and any other relevant information on the topic, in its next BR.

50. In its BR1, the EU did not provide success and failure stories related to technology development and transfer. The EU may consider providing this information in its next BR to increase the completeness of its report.

4. Capacity-building

51. In its BR1, the EU provided information on how it has provided capacity-building support for mitigation, adaptation and technology that responds to the existing and emerging needs identified by non-Annex I Parties.

52. The EU reported that it and its member States generally support a wide range of climate-related capacity development activities relating to adaptation, mitigation and climate financing, as well as integration or ‘mainstreaming’ of climate change into national policies, strategies and plans in all relevant sectors. This includes support for the integration of climate change into country systems and participation in the international climate change negotiation process. The EU also reported that it responds to the existing and emerging capacity-building needs of non-Annex I Parties by following the principles of “national ownership, stakeholder participation, country-driven demand, cooperation between donors and across programs, and impact assessment and monitoring”. The policy dialogue with partner countries is a good example of how the EU engages in regular discussions with non-Annex I Parties to discuss climate change and provide bilateral support, including capacity-building activities.

53. The BR1 includes information in a textual format describing a number of individual capacity-building measures and activities carried out by the EU during the reporting period. Examples include the Low Emission Capacity Building Programme in 25 developing countries, the Chololo Ecovillage initiative in Tanzania, the Peri-urban Water and Sanitation Programme in the Plurinational State of Bolivia and the Nepal Climate Change Support Programme.

54. In the original submission of CTF table 9, the EU did not report information on individual capacity-building measures and activities. The EU stated in the BR1 that it is still not possible to report on capacity-building activities in the tabular format provided. After discussions with the ERT during the review, the EU submitted revised CTF tables within two weeks of the review (on 10 April 2014), including table 9 on the provision of capacity-building support. The revised CTF table 9 includes the information originally presented in the BR1, but in tabular format. Based on the revised CTF table 9, the information provided by the EU is complete and transparent.

III. Conclusions

55. The ERT conducted a technical review of the information reported in the BR1 and CTF tables of the EU in accordance with the UNFCCC reporting guidelines on BRs. The ERT concludes that the BR1 and CTF tables provide a good overview of information on emissions and removals related to the quantified economy-wide emission reduction target, a description of the target, progress made by the EU to achieve its target, and provision of support to developing country Parties. During the review, the EU provided additional information on its quantified economy-wide emission reduction target, the effects of mitigation actions, financial resources and non-Annex I Parties support, and technology transfer.

56. For the EU-28, total GHG emissions and removals related to the target for 2011 were estimated to be 18.3 per cent below the 1990 level excluding LULUCF and 19.9 per cent below including LULUCF. Emission decreases were mainly attributed to CO₂ emissions (constituting 82.2 per cent of total GHG emissions in 2011), which decreased by 15.0 per cent over this period. Over the same period, CH₄ emissions decreased by 35.0 per cent, while N₂O emissions decreased by 35.7 per cent. These decreases were mainly driven by (a) fossil fuel switching and better energy efficiency in the manufacturing industries and construction sector, as well as the public electricity and heat production sector (CO₂); (b) reductions in managed waste disposal on land mainly caused by the increased use of recycling and incineration of waste with energy recovery, reductions in coal mining, and a decrease in cattle production (CH₄); and (c) emission reduction measures in adipic acid production and nitric acid production, as well as decreased use of fertilizer and manure on agricultural soils (direct and indirect soil emissions) (N₂O).

57. The EU-28 2020 target is a GHG emissions reduction of 20 per cent by 2020 below the 1990 emissions level. The EU plans to achieve the target by implementing the climate and energy package, which includes the EU ETS, the ESD (for non-ETS sectors), renewable energies and energy efficiency legislation, and legislative proposals on 2020 targets for CO₂ from cars and vans. The climate and energy package allows CERs and ERUs to be used for compliance purposes, subject to a number of restrictions, including a limit of 50 per cent of the required reduction below 2005 levels for those under the EU ETS. Under the Convention target for the EU-28, emissions and removals from the LULUCF sector are excluded in the non-ETS sector effort under the ESD.

58. According to the projected emission trends for the EU-28 under the WEM scenario, total GHG emissions (excluding international aviation) are projected to be 22.2 per cent lower in 2020 than in 1990, while the target is 20 per cent below 1990. Under the WAM scenario, total GHG emissions (excluding international aviation) are projected to be 25.9 per cent lower in 2020 than in 1990. The EU aggregates the member State projections for reporting its emission projections. A gap-filling technique was used to substitute the emissions for missing time periods for member States that have not reported projection data for the entire time series.

59. The EU general strategies for meeting its target establish key objectives for socioeconomic development of the EU, which include climate and energy goals: a 20 per cent decrease in GHG emissions compared with 1990, the provision of 20 per cent energy supply from the renewable sources, and an increase in energy efficiency by 20 per cent by 2020. The overarching cross-sectoral mitigation actions in the EU, which are outlined in the climate and energy package, are included in the EU ETS and the ESD.

60. The EU reported that in 2011 and 2012 it committed USD 1.82 billion in financial assistance, all of which was classified as ODA. In 2011 and 2012, support provided to mitigation was higher than support provided to adaptation, but the difference narrowed

substantially in 2012. The highest level of support goes to cross-cutting projects, which impact more than one sector, followed by support to the energy and agriculture sectors. Support for the forestry sector has remained at a relatively high level. During the reporting period, the EU placed a particular regional focus on Africa, where it committed USD 768 million. Asia received the second highest amount of support at USD 255 million.

61. The EU and its member States generally support a wide range of climate-related capacity development activities relating to adaptation, mitigation and climate financing, as well as integration or mainstreaming of climate change into national policies, strategies and plans in all relevant sectors. The EU also responds to the existing and emerging capacity-building needs of non-Annex I Parties by following the principles of “national ownership, stakeholder participation, country-driven demand, cooperation between donors and across programs, and impact assessment and monitoring”. The policy dialogue with partner countries is a good example of how the EU engages in regular discussions with non-Annex I Parties to discuss climate change and provide bilateral support, including capacity-building activities.

62. In the course of the review, the ERT formulated several recommendations relating to the completeness and transparency of the EU’s reporting under the Convention. The key recommendations⁸ are that the EU:

(a) Improve the completeness of reporting by including in the next BR the following information:

- (i) How the EU supports non-Annex I Parties in adapting to the economic and social consequences of response measures;
- (ii) Measures for the support of the development and enhancement of endogenous capacities and technologies of non-Annex I Parties;
- (iii) Target area of mitigation or adaptation, the sectors involved, the sources of technology transfer from the public and private sectors, and distinguishing between activities undertaken by the public and private sectors (CTF table 8);

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

- (i) The contribution of international aviation to the projections from Iceland, Liechtenstein and Norway, presented separately, in line with the UNFCCC Annex I inventory reporting guidelines;
- (ii) An explanation clarifying how resources have been determined as being “new and additional”.

⁸ The recommendations are given in full in the relevant sections of this report.

Annex

Documents and information used during the review

A. Reference documents

“UNFCCC biennial reporting guidelines for developed country Parties”. Annex to decision 2/CP.17. Available at

<<http://unfccc.int/resource/docs/2011/cop17/eng/09a01.pdf#page=4>>.

“Guidelines for the technical review of information reported under the Convention related to greenhouse gas inventories, biennial reports and national communications by Parties included in Annex I to the Convention”. Annex to decision 23/CP.19. Available at

<<http://unfccc.int/resource/docs/2013/cop19/eng/10a02.pdf#page=20>>.

FCCC/ARR/2013/EU. Report of the individual review of the annual submission of the European Union submitted in 2013. Available at

<<http://unfccc.int/resource/docs/2014/arr/eu.pdf>>.

FCCC/IDR.5/EU. Report of the in-depth review of the fifth national communication of the European Union. Available at <<http://unfccc.int/resource/docs/2011/idr/eu05.pdf>>.

Sixth national communication and first biennial report of the European Union. Available at <https://unfccc.int/files/national_reports/annex_i_natcom_/application/pdf/eu_nc6.pdf>.

Common tabular format tables of European Union. Available at

<http://unfccc.int/national_reports/biennial_reports_and_iar/submitted_biennial_reports/items/7550.php>.

2013 GHG inventory submission of the European Union. Available at

<https://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. Ana Danila (European Commission), including additional material on updated policies and measures, greenhouse gas projections, the national registry and recent climate policy developments in the European Union. The following documents⁹¹ were also provided by the EU:

European Commission. 2013. *Progress towards Achieving the Kyoto and EU 2020*

Objectives. Brussels: European Commission. Available at

<http://ec.europa.eu/clima/policies/g-gas/docs/com_2013_698_en.pdf>.

European Environment Agency. *Trends and Projections in Europe 2013 – Tracking Progress towards Europe’s Climate and Energy Targets until 2020*. Copenhagen: EEA.

Available at <<http://www.eea.europa.eu/publications/trends-and-projections-2013>>.

¹ Reproduced as received from the Party.