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**Report of the technical review of the first biennial report of  
Greece**

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 Greece 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 Greece, the Convention entered into force on 2 November 1994. Under the Convention, Greece made a joint commitment with other member States of the European Union (EU) to reduce its greenhouse gas (GHG) emissions by 20.0 per cent by 2020 below the 1990 level.
2. This report covers the in-country technical review of the first biennial report (BR1)<sup>1</sup> of Greece, 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 29 September to 4 October 2014 in Athens, Greece, and was conducted by the following team of nominated experts from the UNFCCC roster of experts: Ms. Ulla Jennische (Sweden), Mr. Hengsi Wilson Lin (Singapore), Mr. Reed Schuler (United States of America) and Mr. Jongikhaya Wit (South Africa). The review was coordinated by Mr. Daniel Hooper (secretariat).
4. During the review, the expert review team (ERT) reviewed each section of the BR1.
5. In accordance with decision 23/CP.19, a draft version of this report was communicated to the Government of Greece, which provided comments that were considered and incorporated, as appropriate, with revisions into this final version of the report.

### **B. Summary**

6. The ERT conducted a technical review of the information reported in the BR1 of Greece 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, Greece provided further relevant information as follows:
  - (a) Information on what “new and additional” financial resources it has provided pursuant to Article 4, paragraph 3, of the Convention and clarification on how it has determined such resources as being “new and additional”;
  - (b) Financial contributions to multilateral financial institutions and other funds;
  - (c) Information on policies and measures (PaMs) by sector and by gas;
  - (d) Information on its projections scenarios, including the estimated impacts of PaMs, as well as modelling assumptions and conditions.

#### **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.

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<sup>1</sup> The biennial report submission comprises the text of the report and the common tabular format (CTF) tables. Both the text and the CTF tables have been subject to the technical review.

## 2. Timeliness

9. The BR1 was submitted on 31 December 2013, before the deadline of 1 January 2014 mandated by decision 2/CP.17. The common tabular format (CTF) tables were submitted on 31 December 2013. A revised version of the CTF tables was submitted on 2 October 2014. The resubmission was based on findings identified by the ERT during the review week.

## 3. Adherence to the reporting guidelines

10. The information reported by Greece 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 Greece<sup>a</sup>

<i>Sections of the biennial report</i>	<i>Completeness</i>	<i>Transparency</i>	<i>Reference to paragraphs</i>
Greenhouse gas emissions and trends	Complete	Transparent	
Assumptions, conditions and methodologies related to the attainment of the quantified economy-wide emission reduction target	Complete	Transparent	
Progress in achievement of targets	Complete	Mostly transparent	19
Projections	Complete	Transparent	
Provision of support to developing country Parties	Mostly complete	Transparent	31, 34

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

## II. Technical review of the reported information

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

11. Greece has provided a summary of information on GHG emission trends for the period 1990–2011 in its BR1 and CTF table 1. This information is consistent with the 2013 national GHG inventory submission. During the review, the ERT took note of the 2014 annual submission. To reflect the most recently available data, the Party's 2014 annual inventory data have been used as the basis for discussion in this report.

12. Total GHG emissions<sup>2</sup> excluding emissions and removals from land use, land-use change and forestry (LULUCF) increased by 5.8 per cent between 1990 and 2012, whereas total GHG emissions including net emissions or removals from LULUCF increased by 5.2 per cent over the same period. During the period 1990–2000, the increase in GHG emissions was mainly owing to sustained economic growth. Between 2000 and 2007, the annual GHG emission growth rate (approximately 0.5 per cent) was significantly lower

<sup>2</sup> In this report, the term "total GHG emissions" refers to the aggregated national GHG emissions expressed in terms of carbon dioxide equivalent excluding land use, land-use change and forestry, unless otherwise specified.

than both the annual growth rate of gross inland energy consumption (approximately 1.9 per cent) and gross domestic product (GDP) annual growth rate (approximately 4.2 per cent). GHG emissions have been decreasing in Greece since 2008, mostly owing to the economic recession. Further information on the review of emission and emission trends is provided in chapter II.A of the report of the technical review of the sixth national communication (IDR/NC6).

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

13. In its BR1 and CTF table 2, Greece reported a description of its quantified economy-wide emission reduction target, referred to henceforth as the target, including associated conditions and assumptions. Under the Convention, Greece participates in the EU quantified economy-wide emission reduction target to achieve a 20.0 per cent reduction in emissions by 2020 compared with the 1990 (base year) level. The target for the EU and its member States is formalized in the EU 2020 climate and energy package. This includes the European Union Emissions Trading System (EU ETS) and the effort-sharing decision (ESD). This legislative package regulates emissions of carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride (SF<sub>6</sub>) using global warming potential (GWP) values from the Fourth Assessment Report (AR4)<sup>3</sup> of the Intergovernmental Panel on Climate Change to aggregate EU GHG emissions up to 2020.

14. The regulation of the emissions covered by the EU ETS entered into force on 1 January 2005, and the new period started in 2013 based on a yearly reduction equal to 1.74 per cent of the average allocation in the period 2008–2012, extrapolated starting in 2010, leading to a 21.0 per cent GHG emission reduction by 2020 compared to the 2005 level. As of 2013, emissions of sectors not covered by the EU ETS (non-ETS sectors) are regulated by member State specific targets, based on average emissions from 2008 to 2010 and on GDP, which leads to a collective reduction by all the member States of 10.0 per cent by 2020 compared with 2005 at the EU level.

15. Under the ESD, Greece has a reduction target of 4.0 per cent by 2020 compared with 2005 for emissions from non-ETS sectors. The ESD also includes binding renewable energy goals and non-binding energy efficiency goals for each member State. Greece has committed itself to achieving a binding target of 18.0 per cent share of renewable energy sources (RES) in the final consumption of energy by 2020, which it has voluntarily increased to 20.0 per cent of the final energy consumption by 2020. Greece also has a non-binding target under the ESD to achieve a reduction in end-use energy consumption of 9.0 per cent (16.46 TWh) for the period 2008–2016 compared to the average of 2001–2005. Under directive 2012/27/EU, this translates into an indicative national target of primary energy consumption for 2020 of 27.1 Mtoe. In line with the EU approach to its target, Greece does not include emissions or removals from the LULUCF sector in defining its target. Greece does not plan to use market-based mechanisms under the Convention to achieve the target.

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<sup>3</sup> The quantified economy-wide emission reduction target by Greece is expressed using the GWP values from the AR4, while emission levels are assessed using the values from the Intergovernmental Panel on Climate Change Second Assessment Report as per the “Guidelines for the preparation of national communications by Parties included in Annex I to the Convention, Part I: UNFCCC reporting guidelines on annual greenhouse gas inventories”.

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

16. In its BR1 and CTF tables 3 and 4, Greece reported information on its mitigation actions implemented and planned since its fifth national communication (NC5) to achieve its target. Greece also reported on the use of units from market-based mechanisms and LULUCF to achieve its target.

17. The ERT reviewed the reported information and provided its assessment of progress made towards achieving the target. Across the EU, it is expected that the market mechanism of the EU ETS will guarantee that emissions from sectors under this scheme (mainly large point sources such as power plants and industrial facilities) will achieve the 2020 target of 21.0 per cent below the 2005 level. Under the EU ESD, Greece has to reduce its emissions from non-ETS sectors by 4.0 per cent by 2020 compared with the 2005 level.

18. In its sixth national communication (NC6)/BR1, Greece provided emission projections separately for ETS sectors and non-ETS sectors. The reported emission projections indicate that Greece's GHG emissions will be 58,228 kt carbon dioxide equivalent (CO<sub>2</sub> eq) for non-ETS sectors in 2020. During the review, Greece informed the ERT that Greece's annual emission allocation for 2020 is 60,652 kt CO<sub>2</sub> eq, which is based on its non-ETS target to reduce GHG emissions by 4.0 per cent by 2020 compared with the 2005 level. Therefore, Greece is expected to meet its non-ETS target for 2020 on the basis of domestic mitigation actions. To increase transparency, and to facilitate the assessment of the progress of the Party towards achieving its target for the non-ETS sectors by 2020, Greece may consider including its annual emission allocations for 2020 in its next biennial report (BR).

### 1. Mitigation actions and their effects

19. In its BR1, Greece provided information on its package of mitigation actions introduced to achieve its target by referencing chapter 4.3 of its NC6, as well as BR1 CTF table 3. The NC6 provided information on mitigation actions organized by sector. However, the ERT noted that the presentation of PaMs by sector is not consistently subdivided by gas, although information about the gases affected by specific PaMs is presented in an overall summary table for the entire PaMs chapter in accordance with example table 1 of 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". To improve the transparency of reporting, the ERT recommends that Greece organize its PaMs, to the extent appropriate, by sector and by gas to reflect the information reported in the overall PaMs table in its next BR/national communication (NC). A detailed review of the reported information is provided in chapter II.B of the IDR/NC6.

20. As reported by Greece in its BR1, the PaMs with the highest mitigation impacts are the "promotion of renewable energy sources" and the "promotion of natural gas". Greece's national renewable energy action plan sets out Greece's national target of 20.0 per cent of primary energy use from RES in 2020. The indicative shares of RES are estimated to be 40 per cent in the electricity sector, 20 per cent in the heating sector and 10 per cent in the transport sector. In the electricity sector, Greece has projected levels of approximately 4.7 GW from wind energy plants and 3.6 GW from photovoltaic sources in 2020. The primary underlying PaM is the feed-in tariff for incentivizing installation of renewable energy. In addition, Greece has implemented measures to facilitate the installation of RES, including simplifying the licensing of smaller projects, incentives to reduce community resistance to local renewables development, and a centralized process for RES development permitting.

21. Greece has indicated that supporting natural gas in its national energy system is a major priority of its national energy policy. The deregulation of electricity and natural gas markets, as well as the completion of the first private power generation units in the 1990s, are considered to be the two main reasons for the increase of the penetration level of natural gas in the power generation sector. In addition, the EU ETS plays an important role in supporting natural gas in the energy system, which leads to further utilization of cleaner fuels. As reflected in the “promotion of natural gas” PaM, Greece has undertaken a number of actions from 1996 to 2013 to promote natural gas, including maintaining no excise duty, reducing personal income tax for converting home heating systems to natural gas or installing new natural gas heating systems, providing discounts on connection fees, developing natural gas infrastructures and establishing measures to market the benefits of natural gas and encourage fuel switching.

22. The ERT assessed the Party’s existing and planned PaMs and their estimated impact. The assessment was carried out on the basis of CTF table 3, assisted by the text of the BR1. The estimated impact of the PaMs in 2020 is approximately 41,033 kt CO<sub>2</sub> eq, or 39.1 per cent of the 1990 emission level. According to this information and the projections discussed in chapter II.C.3 above, the existing and planned PaMs and their estimated impacts are sufficient for the Party to achieve its target for 2020.

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

Table 2

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

<i>Sectors affected</i>	<i>List of key policies and measures</i>	<i>Estimate of mitigation impact (kt CO<sub>2</sub> eq)</i>
<b><i>Policy framework and cross-sectoral measures</i></b>	Second national climate change programme	IE
	European Union Emissions Trading System	IE
	National renewable energy action plan	IE
<b><i>Energy</i></b>		
Energy supply	Promotion of natural gas	12 582
Renewable energy	Promotion of renewable energy	20 323
Energy efficiency	Second national energy efficiency action plan (2 <sup>nd</sup> NEEAP)	IE
Residential and commercial sectors	Partial implementation of 2 <sup>nd</sup> NEEAP	2 200
<b><i>Transport</i></b>		
	Biofuel use in transportation	2 173
	Excise duty on vehicle transport fuels	NE
	Value added tax rate on motor vehicle fuels	NE
	Interventions in vehicles	300
	Promotion of energy-efficient vehicles	NE
<b><i>Industrial sectors</i></b>	Partial implementation of 2 <sup>nd</sup> NEEAP	300
<b><i>Agriculture</i></b>		
	National strategic plan for rural development	IE
	Establishing common rules for direct support schemes under the common agricultural policy	880
<b><i>Forestry</i></b>	Broad forestry protection / restoration	NE
<b><i>Waste management</i></b>		
	Recovery of organic waste	800
	Recovery of biogas	500



*Note:* The greenhouse gas reduction estimates given are reductions in carbon dioxide equivalent for 2020.

*Abbreviations:* IE = included elsewhere, NE = not estimated.

24. In its BR1, Greece 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. For example, Greece discussed the monitoring mechanism regulation (regulation 525/2013), which is a mechanism for monitoring and reporting GHG emissions and for reporting other information at national and EU levels that are relevant to climate change. The regulation was adopted in May 2013, repealing decision 280/2004/EC (monitoring mechanism decision). The main aims of the regulation are to improve the quality of the data reported and assist the EU and member States with the tracking of their progress towards emission targets for 2013–2020. The monitoring mechanism regulation improves the current reporting rules by introducing a number of new reporting elements. In addition, Greece discussed the reform to the EU ETS in phase III (2013–2020), which has resulted in important changes with regard to Greek domestic institutional arrangements for the monitoring and reporting of GHG emissions under the EU ETS.

25. Greece provided, to the extent possible, detailed information on the assessment of the economic and social consequences of response measures. The BR1 underlines that Greece follows EU policies, which takes into account the minimization of adverse effects of emission reduction PaMs, according to Articles 4.8 and 4.9 of the Convention and Article 2 of the Kyoto Protocol. The EU has a wide-ranging impact assessment system for all new policy initiatives, ensuring that potential adverse social, environmental and economic impacts on various stakeholders and third parties are identified and minimized within the legislative process. Existing international policy dialogues are also used to keep developing countries fully informed of forthcoming initiatives, and as a means for exchanging information, data and results of preparatory studies with partner countries and other external stakeholders.

## 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

26. Greece reported in its BR1 and CTF table 4 on its plans to use market-based mechanisms under the Convention and on the contribution from LULUCF. Greece reported in its BR1 that it is not planning to use market-based mechanisms under the Convention to achieve its target. Greece reported on the contribution from LULUCF to achieve its target in its BR1 and CTF table 4. Table 3 illustrates how Greece 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 Greece**

Year	<i>Emissions excluding</i>	<i>LULUCF<sup>a</sup></i>	<i>Emissions including</i>	<i>Use of units from the</i>
	<i>LULUCF</i>	<i>emissions/removals</i>	<i>LULUCF</i>	<i>market-based</i>
	<i>(kt CO<sub>2</sub> eq)</i>	<i>(kt CO<sub>2</sub> eq)</i>	<i>(kt CO<sub>2</sub> eq)</i>	<i>mechanisms<sup>b</sup></i>
				<i>(kt CO<sub>2</sub> eq)</i>
Base year (1990)	104 586.58	NA	NA	NA
2010	117 278.12	NA	NA	0
2011	115 045.02	NA	NA	0

Year	<i>Emissions excluding</i>	<i>LULUCF<sup>a</sup></i>	<i>Emissions including</i>	<i>Use of units from the</i>
	<i>LULUCF</i>	<i>emissions/removals</i>	<i>LULUCF</i>	<i>market-based</i>
	<i>(kt CO<sub>2</sub> eq)</i>	<i>(kt CO<sub>2</sub> eq)</i>	<i>(kt CO<sub>2</sub> eq)</i>	<i>mechanisms<sup>b</sup></i>
2012	NR	NA	NA	0

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

<sup>a</sup> In common tabular format table 4, Greece reported a contribution from the LULUCF sector of 636.76 kt carbon dioxide equivalent (CO<sub>2</sub> eq) in 2010, 634.98 kt CO<sub>2</sub> eq in 2011 and 630.00 kt CO<sub>2</sub> eq in 2012 as part of information on progress towards the target. The expert review team did not include these values in the table above as Greece is a member State of the European Union, which has an unconditional commitment to reduce greenhouse gas emissions by 20.0 per cent by 2020 compared with 1990 that does not include emissions/removals from LULUCF.

<sup>b</sup> In CTF table 4, Greece reported the use of units from market-based mechanisms as 63,661.02 kt CO<sub>2</sub> eq in 2010, 59,925.87 kt CO<sub>2</sub> eq in 2011, and 54,460.96 kt CO<sub>2</sub> eq in 2012. The reported units correspond to the total quantities of Kyoto Protocol units, including assigned amount units, at the end of each reported year.

### 3. Projections

27. Greece has provided in its BR1 and CTF tables 5 and 6 comprehensive and well-organized information on its updated projections for 2020 and 2030. A detailed review of the reported information is provided in chapter II.C of the IDR/NC6. The Party has provided information on the key variables and assumptions used in the emission projection analysis in CTF table 5. The information includes projected population statistics, number of households, CO<sub>2</sub> emission allowance prices and growth in GDP and international fuel prices. In CTF tables 6(a) and (c), Greece provides detailed trends by gas and by sector for ‘with measures’ and ‘with additional measures’ scenarios.

28. In its BR1, Greece reports that there have been no changes since its NC5 in the model or methodology used for preparation of projections. However, during the review, the ERT was informed that the modelling approach for the energy sector has been changed since the NC5 to include the use of a multiregional TIMES-MARKAL model to improve the accuracy of the energy sector projections. To enhance the transparency of reporting, the ERT encourages Greece to report on the changes since its most recent NC in the model or methodologies used for the preparation of projections and provide supporting documentation, in its next BR.

29. Overall, Greece’s reported projections of total GHG emissions for 2020 and 2030 show a decreasing emission trend. Total emissions in 2020 are expected to be at levels that are 0.1 per cent and 1.0 per cent below the 1990 level in the ‘with measures’ and ‘with additional measures’ scenarios, respectively. Total emissions in 2030 are expected to be at levels that are 4.5 per cent and 9.6 per cent below the 1990 level in the ‘with measures’ and ‘with additional measures’ scenarios, respectively.

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

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

30. In its BR1 and CTF table 7, Greece reported information on the provision of financial, technological and capacity-building support required under the Convention.

31. In its BR1, Greece did not indicate what “new and additional” financial resources it has provided pursuant to Article 4, paragraph 3, of the Convention, and did not clarify how

it has determined such resources as being “new and additional”. During the review, Greece stated that funds were determined as “new and additional” if they were new sources or amounts of funding since the last NC reporting period (since 2008), and climate change supporting activities were targeted. To increase the completeness of reporting, the ERT recommends that Greece include this information in its next BR.

32. In its BR1, Greece did not report on private financial flows leveraged by bilateral climate finance towards mitigation and adaptation activities by Parties not included in Annex I to the Convention (non-Annex I Parties), including PaMs that promote the scaling up of private investment in mitigations and adaptation activities in developing country Parties. During the review, Greece explained that it does not have a system to track private financial flows, as Greece’s current emphasis is on tracking public financial flows associated with climate change. The ERT encourages the Party to include this information (if available), or include information regarding why it is not feasible for Greece to report on this information, in its next BR.

33. In its original submission of the BR1 CTF tables, Greece did not report information related to its financial contributions to multilateral financial institutions and other funds for the year 2012 in CTF table 7(a) – provision of public financial support through multilateral channels. During the review, Greece compiled the information associated with financial flows for 2012 and resubmitted its BR1 CTF tables. In Greece’s revised CTF tables, it reported financial flows totalling USD 1,056,514 to United Nations specialized bodies.

34. In its original submission of the BR1 CTF tables, Greece did not specify the source of funding and the financial instrument used for each reported financial flow in CTF table 7(b) – provision of public financial support through bilateral, regional and other channels. In Greece’s revised BR1 CTF tables, most of the financial flows were reported as being official development assistance, with grants used as the main financial instrument. However, some reported entries still did not include the funding source and the type of financial instrument. To improve completeness, the ERT recommends that Greece include the source of funding and the financial instrument for each reported financial flow in BR1 CTF table 7(b), in its next BR.

35. Greece reported on its climate-specific public financial support by allocation channels for 2011 and 2012, totalling USD 24.88 million (USD 23.21 million in 2011 and USD 1.67 million in 2012). Table 4 includes some of the information reported by Greece on its provision of financial support.

Table 4

**Summary of information on provision of financial support in 2011–2012**

(United States million dollars)

<i>Allocation channel of public financial support</i>	<i>Years of disbursement</i>	
	<i>2011</i>	<i>2012</i>
Contributions through United Nations bodies	2.45	1.06
Climate-specific contributions through bilateral, regional channels	20.76	0.61

## 2. Approach used to track support provided

36. As shown in its BR1, Greece continues to focus its climate change support on the Mediterranean region. Specifically, more than 90 per cent of Greece’s assistance through bilateral and regional channels in 2011, and 100 per cent in 2012, went towards supporting the Mediterranean region. However, overall, there was a significant decrease in bilateral and regional support between 2011 and 2012 of approximately 97 per cent.

37. To assist in the tracking of support provided, the Hellenic Aid programme has systems in place to track, measure and record climate change related assistance provided to developing countries. Specifically, the Hellenic Aid programme coordinates programming, allocation and monitoring of development cooperation, multilateral and bilateral funding. Greece further explained that the Ministry of Economy is responsible for Greece's contributions to multilateral institutions, such as the Global Environmental Facility, the World Bank, the European Bank for Reconstruction and Development and the United Nations Development Programme. The Ministry of Environment, Energy and Climate Change is responsible for the allocation of annual official and multilateral contributions to international organizations, United Nations convention secretariats including the United Nations Environment Programme and the UNFCCC, trust funds and agencies related to environmental issues.

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

38. In its BR1 and CTF table 8, Greece has provided information on activities related to the transfer of technology to developing countries, including information on the public sector. The ERT noted that the information provided on technology transfer in CTF table 8 is for one major regional programme, the Black Sea Economic Cooperation Organization, which targets both mitigation and adaptation. Greece, as a member of this organization, is actively engaged in efforts made by Black Sea Economic Cooperation Organization member States to promote cooperation and exchange of best practices for the protection of the Black Sea marine and coastal environment. In this regard, these member States have elaborated a general cooperation framework, the Black Sea Economic Cooperation Organization action plan, for cooperation in the field of environmental protection. These activities take into account the EU relevant legislative framework that promotes the development of innovative, environmentally friendly and resource-saving technologies and the development of climate change and adaptation strategies. The sectors affected by this programme are the energy, transport, marine, coastal and biodiversity sectors.

39. In its NC6/BR1, Greece did not report on success and failure stories regarding technology transfer of climate-friendly technologies for the benefit of non-Annex I Parties. Greece's BR1 references chapters 7 and 8 of its NC6, which includes examples of technology transfer projects in tabular format. The ERT noted that the examples of technology transfer projects that are included in the NC6 are the same projects as those reported in the NC5, and therefore it is not transparent if these projects were still operational for the NC6/BR1 reporting period. In addition, Greece did not indicate which factors led to the projects' success or failure. To increase the transparency of reporting, the ERT encourages Greece to include such information in its next BR/NC.

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

40. In its BR1, Greece has provided information on how it has provided capacity-building support for mitigation, adaptation and technology. Greece's capacity-building programme is focusing on adaptation in line with three major regional programmes: the Mediterranean component of the EU initiative Water for Life, the Horizon 2020 programme on the eradication of pollution in the Mediterranean region and the Mediterranean educational initiative for environment and sustainability. These programmes offer strategic open-ended partnerships and serve as catalysts for security and eradication of pollution in the Mediterranean region.

41. The ERT noted that in its original submission of BR1 CTF table 9, Greece did not include capacity-building work that Greece provides through its involvement in the Horizon 2020 programme on the eradication of pollution in the Mediterranean region. In response to a question raised by the ERT during the review, Greece included this

information in the resubmission of its BR1 CTF tables. As stated in the revised BR1 CTF tables, the Horizon 2020 programme aims to depollute the Mediterranean by the year 2020 by tackling the sources of pollution that account for approximately 80 per cent of the overall pollution of the Mediterranean Sea, including municipal waste, urban wastewater and industrial pollution.

42. The EU initiative Water for Life in the Mediterranean focuses on adaptation. Specifically, the main objective is to assist the design of better, demand-driven and output-oriented water programmes in the region, and to facilitate the effective coordination of water programmes and projects, targeting more effective use of existing funds, through identification of gaps. The main objective of the Mediterranean educational initiative for environment and sustainability is to facilitate the educational community of the Mediterranean to contribute in a systematic and concrete way the implementation of Millennium Development Goals of the United Nations, through innovative educational programmes for the environment and sustainable development.

### III. Conclusions

43. The ERT conducted a technical review of the information reported in the BR1 and CTF tables of Greece 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 target, a description of the target, progress made by Greece to achieve its target and provision of support to developing country Parties. During the review, Greece provided additional information on: what “new and additional” financial resources it has provided pursuant to Article 4, paragraph 3, of the Convention and clarification on how it has determined such resources as being “new and additional”; financial contributions to multilateral financial institutions and other funds; information on PaMs by sector and by gas; and information on its projections scenarios, including the estimated impacts of PaMs, as well as modelling assumptions and conditions.

44. Greece’s emissions and removals related to the target were estimated for 2012 to be 5.8 per cent above its 1990 level excluding LULUCF and 5.2 per cent above including LULUCF. During the period 1990–2000, the increase in GHG emissions was mainly owing to increasing economic development. Between 2000 and 2007, the annual GHG emission growth rate (approximately 0.5 per cent) was significantly lower than both the annual growth rate of gross inland energy consumption (approximately 1.9 per cent) and GDP annual growth rate (approximately 4.2 per cent). GHG emissions have been decreasing in Greece since 2008, mostly owing to the economic recession.

45. Greece is committed to achieving a joint EU quantified economy-wide emission reduction target to achieve a 20.0 per cent reduction in emissions by 2020 compared with the 1990 (base year) level. The target for the EU and its member States will be achieved through the EU 2020 climate and energy package. Among the key PaMs in this package are the EU ETS and the EU ESD. Efforts to meet the target for the EU and its 28 member States will be divided among member States in both the ETS and non-ETS sectors as follows: (a) a 21.0 per cent GHG emission reduction by 2020 compared with the 2005 level in the ETS sectors and (b) a 10.0 per cent emission reduction by 2020 compared with the 2005 level under the ESD for the non-ETS sectors. Under the ESD, Greece has a target to reduce emissions by 4.0 per cent below the 2005 level by 2020 for sectors covered by the ESD. The ESD also includes binding renewable energy goals and non-binding energy efficiency goals for each member State. In line with the EU approach to its target, Greece does not include emissions or removals from the LULUCF sector in defining its target. Greece does not plan to use market-based mechanisms under the Convention to achieve the target.

46. Greece provided emission projections separately for EU ETS sectors and non-ETS sectors. The reported emission projections indicate that Greece's GHG emissions will be 58,228 kt CO<sub>2</sub> eq for non-ETS sectors in 2020. During the review, Greece informed the ERT that Greece's annual emission allocation for 2020 is 60,652 kt CO<sub>2</sub> eq, which is based on its non-ETS target to reduce GHG emissions by 4.0 per cent by 2020 compared with the 2005 level. Across the EU, it is expected that the EU ETS will guarantee that the sectors that fall under this scheme (mainly large point sources such as power plants and industrial facilities) will achieve a 21.0 per cent emission reduction compared with 2005 by 2020. Therefore, Greece is expected to meet its non-ETS target for 2020 on the basis of domestic mitigation actions.

47. Overall, Greece's reported projections of total GHG emissions for 2020 and 2030 show a decreasing emission trend. Total emissions in 2020 are expected to be at levels that are 0.1 per cent and 1.0 per cent below the 1990 level in the 'with measures' and 'with additional measures' scenarios, respectively. Total emissions in 2030 are expected to be at levels that are 4.5 per cent and 9.6 per cent below the 1990 level in the 'with measures' and 'with additional measures' scenarios, respectively.

48. Regarding the provision of financial support to developing country Parties, Greece reported on its climate-specific public financial support by allocation channels for 2011 and 2012, totalling USD 22.80 million (USD 21.59 million in 2011 and USD 1.21 million in 2012). In addition, Greece supplied information on how it has provided capacity-building support for mitigation, adaptation and technology. Greece's capacity-building programme is focusing on adaptation in line with three major regional programmes: the Mediterranean component of the EU initiative Water for Life, the Horizon 2020 programme and the Mediterranean educational initiative for environment and sustainability. These programmes offer strategic open-ended partnerships, and serve as catalysts for security and eradication of pollution in the Mediterranean region.

49. In the course of the review, the ERT formulated several recommendations relating to the completeness and transparency of Greece's reporting under the Convention. The key recommendations<sup>4</sup> are that Greece:

- (a) Improve the completeness of reporting in the next BR by including the following:
  - (i) An indication of what "new and additional" financial resources it has provided pursuant to Article 4, paragraph 3, of the Convention and clarification on how it has determined such resources as being "new and additional";
  - (ii) The source of funding and the financial instrument for each reported financial flow in BR CTF table 7(b);
- (b) Improve the transparency of reporting in the next BR by utilizing the same sectoral categories in the PaMs and projections sections.

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<sup>4</sup> The recommendations are given in full in the relevant sections of this report.

## Annex

### Documents and information used during the review

#### A. Reference documents

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

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

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

FCCC/IDR.5/GRC. Report of the in-depth review of the fifth national communication of Greece. Available at <[http://unfccc.int/documentation/documents/advanced\\_search/items/6911.php?priref=600006290](http://unfccc.int/documentation/documents/advanced_search/items/6911.php?priref=600006290)>.

Sixth national communication of Greece. Available at <[http://unfccc.int/files/national\\_reports/annex\\_i\\_natcom/submitted\\_natcom/application/pdf/nc6\\_greece%5B1%5D.pdf](http://unfccc.int/files/national_reports/annex_i_natcom/submitted_natcom/application/pdf/nc6_greece%5B1%5D.pdf)>.

First biennial report of Greece. Available at <[http://unfccc.int/files/national\\_reports/annex\\_i\\_natcom/submitted\\_natcom/application/pdf/nc6\\_greece%5B1%5D.pdf](http://unfccc.int/files/national_reports/annex_i_natcom/submitted_natcom/application/pdf/nc6_greece%5B1%5D.pdf)>.

Common tabular format tables of Greece. Available at <[http://unfccc.int/files/national\\_reports/biennial\\_reports\\_and\\_iar/international\\_assessment\\_and\\_review/application/pdf/grc\\_2014\\_v2.0\\_formatted.pdf](http://unfccc.int/files/national_reports/biennial_reports_and_iar/international_assessment_and_review/application/pdf/grc_2014_v2.0_formatted.pdf)>.

2013 GHG inventory submission of Greece. Available at <[unfccc.int/files/national\\_reports/annex\\_i\\_ghg\\_inventories/national\\_inventories\\_submissions/application/zip/grc-2013-nir-16apr.zip](http://unfccc.int/files/national_reports/annex_i_ghg_inventories/national_inventories_submissions/application/zip/grc-2013-nir-16apr.zip)>.

2014 GHG inventory submission of Greece. Available at <[unfccc.int/files/national\\_reports/annex\\_i\\_ghg\\_inventories/inventory\\_review\\_reports/application/zip/grc-2014-nir-15apr.zip](http://unfccc.int/files/national_reports/annex_i_ghg_inventories/inventory_review_reports/application/zip/grc-2014-nir-15apr.zip)>.

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

Responses to questions during the review were received from Mr. Georgios Zisis-Tegos (Ministry for the Environment, Energy and Climate Change), including additional material on updated policies and measures, greenhouse gas projections, the national registry and recent climate policy developments in Greece. The following documents<sup>5</sup> were also provided by Greece:

Viglione, A., M. Borga, et al. (2010). “Barriers to the exchange of hydrometeorological data in Europe: Results from a survey and implications for data policy”. *Journal of Hydrology* 394(1–2): 63–77.

<sup>5</sup> Reproduced as received from the Party.

Ministry of Environment, Energy and Climate Change. 2011. 2nd National Energy Efficiency Action Plan.

National Energy Balance. 2014. Electricity imports and exports.

Centre for Renewable Energy Sources, and National Technical university of Athens. Incorporating Grid Expansion Calculation Algorithms in the TIMES model, for improved Operation under wide-scale RES Penetration.

Energy Systems Analysis Laboratory, and Centre for Renewable Energy Sources and Savings. Generation Expansion Planning under Wide-Scale RES Energy Penetration.

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