



United Nations

FMCCC/IRR/2016/GRC



Framework Convention on  
Climate Change

Distr.: General  
30 August 2017

English only

---

## **Report on the review of the report to facilitate the calculation of the assigned amount for the second commitment period of the Kyoto Protocol of Greece**

**Note by the expert review team**


### *Summary*

According to decision 2/CMP.8, each Party with a quantified emission limitation and reduction commitment inscribed in the third column of Annex B to the Kyoto Protocol, as contained in annex I to decision 1/CMP.8, shall submit to the secretariat a report to facilitate the calculation of the assigned amount for the second commitment period of the Kyoto Protocol. In accordance with decision 22/CMP.1, annex, paragraph 11, in conjunction with decision 4/CMP.11, the report to facilitate the calculation of the assigned amount is subject to a review. This report presents the results of the technical review of the report to facilitate the calculation of the assigned amount for the second commitment period of the Kyoto Protocol, conducted by an expert review team in accordance with the “Guidelines for review under Article 8 of the Kyoto Protocol”. The review took place from 29 August to 3 September 2016 in Bonn, Germany.

GE.17-14976(E)



\* 1 7 1 4 9 7 6 \*

Please recycle 



## Contents

	<i>Paragraphs</i>	<i>Page</i>
I. Introduction .....	1–2	3
II. Summary of the reporting on mandatory elements in the report to facilitate the calculation of the assigned amount .....	3	4
III. Technical assessment of the elements reviewed.....	4	6
IV. Questions of implementation .....	5	9
Annexes		
I. Key relevant data for Greece.....		10
II. Documents and information used during the review.....		15
III. Acronyms and abbreviations .....		17

## I. Introduction<sup>1</sup>

1. The review of the report to facilitate the calculation of the assigned amount for the second commitment period of the Kyoto Protocol (hereinafter referred to as the report to facilitate the calculation of the assigned amount) of Greece was organized by the UNFCCC secretariat, in accordance with the “Guidelines for review under Article 8 of the Kyoto Protocol”.<sup>2</sup> The review took place from 29 August to 3 September 2016 in Bonn, Germany, and was coordinated by Mr. Tomoyuki Aizawa (UNFCCC secretariat). Table 1 provides information on the composition of the expert review team (ERT) that conducted the review of Greece.

2. A draft version of this report was communicated to the Government of Greece, which provided comments that were considered and incorporated, as appropriate, into this final version of the report.

Table 1

### Composition of the expert review team that conducted the review of Greece

<i>Area of expertise</i>	<i>Name</i>	<i>Party</i>
Generalist	Mr. Christopher Dore	United Kingdom of Great Britain and Northern Ireland
	Ms. Kristina Saarinen	Finland
Energy	Ms. Tahira Munir	Pakistan
	Mr. Peter Seizov	Bulgaria
	Ms. Nina Uvarova	Russian Federation
IPPU	Ms. Pia Forsell	Finland
	Mr. Andrew Neal	New Zealand
Agriculture	Ms. Marci Baranski	United States of America
	Mr. Abdulkadir Bektas	Turkey
	Mr. Paulo Cornejo	Chile
	Mr. Pa Ousman Jarju	Gambia
LULUCF	Mr. Rizaldi Boer	Indonesia
	Mr. Johannes Brötz	Germany
	Ms. Oksana Butrym	Ukraine
	Ms. Naoko Tsukada	Japan
Waste	Mr. Seungdo Kim	Republic of Korea
	Ms. Mayra Rocha	Brazil
Lead reviewers	Ms. Mayra Rocha	
	Ms. Kristina Saarinen	

<sup>1</sup> At the time of publication of this report, the Party had not yet submitted its instrument of ratification of the Doha Amendment, and the amendment had not yet entered into force. The implementation of the provisions of the Doha Amendment is therefore considered in this report in the context of decision 1/CMP.8, paragraph 6, pending the entry into force of the amendment.

<sup>2</sup> Decision 22/CMP.1 and its annex and any revisions contained in decision 4/CMP.11 and its annex I.

*Abbreviations:* IPPU = industrial processes and product use, LULUCF = land use, land-use change and forestry.

## II. Summary of the reporting on mandatory elements in the report to facilitate the calculation of the assigned amount

3. Table 2 provides a summary of the ERT's assessment of the reporting of mandatory elements by Greece in its report to facilitate the calculation of the assigned amount. Key data and elections by the Party are included in table 4.

Table 2

**Expert review team's assessment of the reporting of mandatory elements by Greece in its report to facilitate the calculation of the assigned amount**

Item	Comment	
General Party information		
Date of submission		Original submission: 15 June 2016
Are there any missing categories or issues related to completeness <sup>a</sup> in the reporting of GHG emissions by sources and removals by sinks for the base year or period?	Yes	See document FCCC/ARR/2016/GRC, annex III
Was the GHG inventory recalculated in accordance with decision 4/CMP.7 for all years from 1990 to the most recent year available?	Yes	
Did the Party report the base year for NF <sub>3</sub> ?	Yes	
Information related to agreement by the Party under Article 4 of the Kyoto Protocol to implement commitments jointly		
Has complete information been reported in accordance with decision 3/CMP.11, paragraph 11, by the Party in fulfilment of its agreement under Article 4 of the Kyoto Protocol, in relation to the following:		
(a) Application of decision 1/CMP.8, paragraphs 23–26, related to carry-over and the previous period surplus reserve account	Yes	For further information, see ID#5 in table 3
(b) Calculation of base-year emissions	Yes	See annex I, table 4. For further information, see ID#1 in table 3
(c) Calculation of the assigned amount	Yes	See annex I, table 4. For further information, see ID#1 in table 3
(d) Calculation of the commitment period reserve	Yes	See annex I, table 4
(e) Application and calculation pursuant to decision 2/CMP.7, annex, paragraph 13	Yes	For further information, see ID#3 in table 3
Information related to the assigned amount and the commitment period reserve		

<i>Item</i>		<i>Comment</i>
Was the assigned amount in the original submission calculated in accordance with Article 3, paragraph 8, of the Kyoto Protocol, Article 3, paragraphs 7 bis and 8 bis, as contained in the Doha Amendment, and decision 13/CMP.1 in conjunction with decision 3/CMP.11?	Yes	See annex I, table 4. For further information, see ID#1 in table 3
Has the Party reported in the original submission the difference between the assigned amount for the second commitment period and average annual emissions for the first three years of the first commitment period, multiplied by 8?	NA	See annex I, table 4. For further information, see ID#4 in table 3
Has the Party indicated in the original submission the approach <sup>b</sup> used to calculate average annual emissions for the first three years of the first commitment period?	NA	See annex I, table 4. For further information, see ID#4 in table 3
Did land-use change and forestry constitute a net source of GHG emissions in the base year, and therefore did the Party include emissions from deforestation in the calculation of the assigned amount?	No	
Was the commitment period reserve in the original submission calculated in accordance with the annex to decision 18/CP.7, the annex to decision 11/CMP.1, the annex to decision 13/CMP.1, paragraph 8 quinquies, and decision 1/CMP.8, paragraph 18?	Yes	See annex I, table 4. For further information, see ID#2 in table 3
<i>Information related to activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol</i>		
If the Party identified activities elected under Article 3, paragraph 4, of the Kyoto Protocol, are these elections in accordance with decision 2/CMP.7, annex, paragraphs 6–8?	Yes	See annex I, table 4
Do the activities elected under Article 3, paragraph 4, of the Kyoto Protocol for the second commitment period include at least those activities elected for the first commitment period?	Yes	
Is information reported on how the national system under Article 5, paragraph 1, of the Kyoto Protocol will identify land areas associated with all additional elected activities and how the Party ensures that land that was accounted for in the first commitment period continues to be accounted for in the second commitment period?	Yes	
Has the Party identified for each activity under Article 3, paragraphs 3 and 4, of the Kyoto Protocol whether it intends to account annually or for the entire commitment period?	Yes	See annex I, table 4
Did the Party provide information on the forest management reference level, including, if appropriate, information on technical corrections and information on how emissions from harvested wood products originating from forests prior to the start of the second commitment period have been calculated in the reference level?	Yes	See annex I, table 4
Has the Party reported the quantity amounting to 3.5% of the base-year GHG emissions, excluding LULUCF, in the	No	See annex I, table 4. For further information, see

<i>Item</i>		<i>Comment</i>
original submission?		ID#3 in table 3
Did the Party indicate whether it intends to apply the provisions to exclude emissions from natural disturbances for the accounting for afforestation and reforestation and/or forest management and provide the relevant information in accordance with decision 2/CMP.7, annex, paragraph 33?	Yes	See annex I, table 4
<i>Information related to the national system and national registry</i>		
Was a description of the national system provided, in accordance with the guidelines for national systems under Article 5, paragraph 1, of the Kyoto Protocol?	NA	This information was already reported and reviewed as part of the initial review of the report to facilitate the calculation of the assigned amount for the first commitment period and did not need to be reported
Was a description of the national registry provided, in accordance with the requirements contained in the annex to decision 13/CMP.1, the annex to decision 5/CMP.1 and the technical standards for data exchange between registry systems adopted by the CMP?	NA	This information was already reported and reviewed as part of the initial review of the report to facilitate the calculation of the assigned amount for the first commitment period and did not need to be reported

*Abbreviations:* CMP = Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol, GHG = greenhouse gas, LULUCF = land use, land-use change and forestry, NA = not applicable.

<sup>a</sup> Issues related to missing categories and completeness are only for those categories for which methods are available in the 2006 Intergovernmental Panel on Climate Change Guidelines for National Greenhouse Gas Inventories.

<sup>b</sup> Parties may elect to calculate average annual emissions for the first three years of the first commitment period by including either the gases and sources listed in Annex A to the Kyoto Protocol, or the GHGs, sectors and source categories used to calculate the assigned amount for the second commitment period.

### III. Technical assessment of the elements reviewed

4. In accordance with decision 22/CMP.1, and in conjunction with decisions 4/CMP.11 and 10/CMP.11, the review of the report to facilitate the calculation of the assigned amount for Greece has been undertaken together with the review of the inventory submission for the first year of the second commitment period.<sup>3</sup> Table 3 contains additional information, if any, to support the ERT's assessment included in table 2 above of the Party's capacity to account for its emissions and the assigned amount, specifically related to: the calculation of the assigned amount for the second commitment period and any adjustments applied; information related to Article 3, paragraph 7 ter, as contained in the Doha Amendment; information related to reporting of activities under Article 3, paragraphs 3 and 4, of the

<sup>3</sup> The annual review report on the 2016 inventory submission of Greece is available at <<http://unfccc.int/resource/docs/2017/arr/grc.pdf>>, while the annual review report on the 2015 inventory submission of Greece is available at <<http://unfccc.int/resource/docs/2016/arr/grc.pdf>>.

Kyoto Protocol; calculation of the commitment period reserve; and the national system and national registry.

Table 3

**Additional findings of the expert review team, if any, related to Greece's reporting of mandatory elements in its report to facilitate the calculation of the assigned amount**

<i>ID#</i>	<i>Finding classification</i>	<i>Description of the finding</i>	<i>Classification of problem</i>
1.	Calculation of the assigned amount	<p>The assigned amount submitted by the Party in its report to facilitate the calculation of the assigned amount was calculated in accordance with Article 3, paragraphs 7 bis, 8 and 8 bis, of the Kyoto Protocol, the annex to decision 13/CMP.1 and annex I to decision 3/CMP.11</p> <p>The ERT notes that the European Union, its member States and Iceland stated that they will fulfil their reduction targets under the second commitment period jointly.<sup>a</sup> The joint assigned amount for the European Union, its member States and Iceland is calculated pursuant to the quantified emission limitation and reduction commitment listed in the third column of the table contained in Annex B to the Kyoto Protocol, while the assigned amount of each member State is determined in accordance with the terms of the joint fulfilment agreement. Specifically, the assigned amount for Greece is fixed, based on Annex II to European Commission decision 2013/162/EU and as adjusted by Commission implementing decision 2013/634/EU.<sup>b</sup></p> <p>The ERT concludes that the assigned amount reported by Greece is in accordance with the joint fulfilment agreement by the European Union, its member States and Iceland</p> <p>Greece did not report base year emissions in its report to facilitate the calculation of the assigned amount. During the review, the ERT calculated the base year emissions to be 107,674,753 t CO<sub>2</sub> eq. In response to the list of potential problems and further questions raised by the ERT (see document FCCC/ARR/2016/GRC), the Party submitted revised estimates, which affected the base year emissions. The revised estimates for the base-year emissions (107,564,136 t CO<sub>2</sub> eq) do not affect the assigned amount for Greece, referred in table 4 below because the assigned amount is determined on the basis of the allocations in the European Union decisions referenced above, and is not calculated using the base-year emission estimates for Greece. The ERT invites Greece to communicate the revised base-year emissions to the European Union with a view to being considered in the calculation of the joint assigned amount of the European Union, its member States and Iceland</p>	Not a problem
2.	Calculation of the commitment period reserve	<p>The commitment period reserve was calculated in accordance with the annex to decision 18/CP.7, the annex to decision 11/CMP.1 and decision 1/CMP.8, paragraph 18</p> <p>The Party reported 100 per cent of the most recently reviewed inventory multiplied by 8 to be 887,952,480 t CO<sub>2</sub> eq in its report to facilitate the calculation of the assigned amount, and 90 per cent of the assigned amount to be 432,712,049 t CO<sub>2</sub> eq. Owing to the submission of revised estimates in response to the list of potential problems and further questions raised by the ERT (see document FCCC/ARR/2016/GRC), Greece submitted revised estimates, and the new GHG emission estimate for 2014 was 101,298,184 t</p>	Not a problem

<i>ID#</i>	<i>Finding classification</i>	<i>Description of the finding</i>	<i>Classification of problem</i>
		CO <sub>2</sub> eq (leading to 100 per cent of the most recently reviewed inventory multiplied by 8 to be revised to 810,385,473 t CO <sub>2</sub> eq). Nevertheless, 90 per cent of the assigned amount is still lower	
3.	Accounting of activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol	In its report to facilitate the calculation of Greece's assigned amount, the Party did not provide information relating to the application and calculation pursuant to decision 2/CMP.7, annex, paragraph 13. In response to a question raised by the ERT during the review week, the Party provided information that showed the additions resulting from forest management under Article 3, paragraph 4, and from forest management project activities undertaken under Article 6 of the Kyoto Protocol do not exceed eight times 3.5% of the base-year GHG emissions excluding LULUCF	Not a problem
4.	Reporting pursuant to Article 3.7 ter of the Doha Amendment	In its report to facilitate the calculation of Greece's assigned amount, the Party did not provide information on the difference between the assigned amount for the second commitment period and average annual emissions for the first three years of the first commitment period, multiplied by 8. In line with the terms of the joint fulfilment of the European Union, its member States and Iceland under Article 3 of the Kyoto Protocol, and as described in the report to facilitate the calculation of the assigned amount of the European Union, Article 3, paragraph 7 ter, of the Kyoto Protocol is applied to the joint assigned amount of the European Union, its member States and Iceland for the second commitment period. In its report, the European Union includes the value for the difference between the joint assigned amount for the second commitment period and average annual emissions for the first three years of the first commitment period for the member States and Iceland, multiplied by 8. The report of the European Union also clarifies that the approach used to calculate average annual emissions for the first three years of the first commitment period is including the gases and sources listed in Annex A to the Kyoto Protocol. In response to a question raised by the ERT during the review week, Greece provided the following information: a joint assigned amount for the European Union, its member States and Iceland for the second commitment period of 37,625,402,324 t CO <sub>2</sub> eq. The average annual emissions for 2008–2010 for the European Union, its member States and Iceland multiplied by 8 was 38,707,039,784 t CO <sub>2</sub> eq	Not a problem
5.	National registry	The ERT took note of the results of the technical assessment of the national registry, including the results of standardized testing, as reported in the standard independent assessment report that was forwarded to the ERT by the administrator of the international transaction log, pursuant to decision 16/CP.10. The ERT noted that in its report to facilitate the calculation of the assigned amount, Greece stated that it will establish a previous period surplus reserve account and implement the functions related to the second commitment period of the Kyoto Protocol in the European Union Emissions Trading System as soon as technically possible	Not a problem
6.	Adjustments	The ERT has not identified the need to apply any adjustments to the estimate for the assigned amount for the second commitment period, as reported by Greece in its report to facilitate the calculation of the assigned amount	Not a problem

*Abbreviations:* ERT = expert review team, LULUCF = land use, land-use change and forestry.



<sup>a</sup> The report to facilitate the calculation of the assigned amount for the European Union is available at <[http://unfccc.int/national\\_reports/initial\\_reports\\_under\\_the\\_kyoto\\_protocol/second\\_commitment\\_period\\_2013-2020/items/9499.php](http://unfccc.int/national_reports/initial_reports_under_the_kyoto_protocol/second_commitment_period_2013-2020/items/9499.php)>.

<sup>b</sup> At the time of publication of this report, the European Union had not yet submitted its instrument of ratification of the Doha Amendment and the information on the joint implementation of such an amendment.

## **IV. Questions of implementation**

5. No questions of implementation were identified by the ERT during the review.

## Annex I

### Key relevant data for Greece

1. Table 4 provides key data and parameters for, and elections by, Greece, relevant for the implementation of the second commitment period of the Kyoto Protocol. The information included in table 4 is as given by the Party in its report to facilitate the calculation of the assigned amount, unless otherwise specified.

Table 4

#### Key relevant data for Greece

<i>Key information or parameter provided</i>	<i>Comment</i>
<i>General Party information</i>	
Did the Party have a QELRC in the first commitment period?	Yes
Greece's QELRC in the second commitment period	Greece will implement its reduction target under the second commitment period jointly with the European Union, its member States and Iceland as described in ID#1, table 3. The QELRC for the European Union, its member States and Iceland is 80% of the base-year emissions
Has the Party reached an agreement under Article 4 of the Kyoto Protocol to fulfil its commitments jointly with other Parties?	Yes
Base year	1990
Base year for HFCs, PFCs and SF <sub>6</sub>	1995
Base year for NF <sub>3</sub>	2000
Base-year emissions, as reported by the Party	107 674 753 t CO <sub>2</sub> eq
Base-year emissions, final, as calculated by the ERT and agreed by the Party	107 564 136 t CO <sub>2</sub> eq
<i>Information related to the calculation of the assigned amount and the commitment period reserve</i>	
Assigned amount, as reported by the Party, and agreed by the ERT	480 791 166 t CO <sub>2</sub> eq
Approach used to calculate the average annual emissions for the first three years of the first commitment period	This difference is calculated on the basis of the joint assigned amount of the European Union, its member States and Iceland and is based on the gases and sources listed in Annex A to the Kyoto Protocol
Difference between the assigned amount for the second commitment period and average annual emissions for the first three years of the first commitment period, multiplied by 8, as	This difference is calculated on the basis of the joint assigned amount of the European Union, its member States

<i>Key information or parameter provided</i>	<i>Comment</i>
reported by the Party and agreed by the ERT	and Iceland and is based on the gases and sources listed in Annex A to the Kyoto Protocol
Commitment period reserve, as reported by the Party and agreed by the ERT	432 712 049 t CO <sub>2</sub> eq
<i>Information related to activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol</i>	
LULUCF parameters	Minimum tree crown cover: 25% Minimum land area: 0.3 ha Minimum tree height: 2 m
Elections under Article 3, paragraphs 3 and 4, of the Kyoto Protocol:	
(a) Afforestation/reforestation	Commitment period accounting
(b) Deforestation	Commitment period accounting
(c) Forest management	Commitment period accounting
(d) Cropland management	Not elected
(e) Grazing land management	Not elected
(f) Revegetation	Not elected
(g) Wetland drainage and rewetting	Not elected
FMRL	–1.830 Mt CO <sub>2</sub> eq/year
Technical corrections to the FMRL	0.168 Mt CO <sub>2</sub> eq/year
3.5% of total base year GHG emissions, excluding LULUCF, as reported by the Party in the original submission	Not reported in the original submission
3.5% of total base year GHG emissions, excluding LULUCF, final value, as calculated by the ERT and agreed by the Party	3 764 745 t CO <sub>2</sub> eq
3.5% of total base year GHG emissions, excluding LULUCF, multiplied by 8, as reported by the Party in the original submission	30 148 931 t CO <sub>2</sub> eq
3.5% of total base year GHG emissions, excluding LULUCF, multiplied by 8, final value as reported by the Party and agreed by the ERT	30 117 958 t CO <sub>2</sub> eq
Will the Party exclude emissions from natural disturbances in accounting for:	
(a) Afforestation and reforestation	Yes
(b) Forest management	Yes

*Abbreviations:* ERT = expert review team, FMRL = forest management reference level, GHG = greenhouse gas, LULUCF = land use, land-use change and forestry, NA = not applicable, QELRC = quantified emission limitation and reduction commitment.

2. Tables 5–7 provide an overview of total greenhouse gas emissions and removals, as submitted by Greece. Where a Party has decided to voluntarily report indirect carbon dioxide emissions, this is noted in the relevant table.

Table 5

**Total greenhouse gas emissions for Greece, base year<sup>a</sup>–2014<sup>b</sup>**  
(kt CO<sub>2</sub> eq)

Year	Total GHG emissions excluding indirect CO <sub>2</sub> emissions		Total GHG emissions including indirect CO <sub>2</sub> emissions <sup>c</sup>		Land-use change (Article 3.7 bis as contained in the Doha Amendment)
	Total including LULUCF	Total excluding LULUCF	Total including LULUCF	Total excluding LULUCF	
Base year	105 285.35	107 564.14	105 285.35	107 564.14	NA
1990	102 437.71	104 716.49	102 437.71	104 716.49	
1995	107 808.98	110 704.11	107 808.98	110 704.11	
2000	125 685.75	127 570.61	125 685.75	127 570.61	
2010	115 365.81	118 626.52	115 365.81	118 626.52	
2011	112 274.83	115 576.78	112 274.83	115 576.78	
2012	108 839.61	112 086.44	108 839.61	112 086.44	
2013	101 415.58	104 564.03	101 415.58	104 564.03	
2014	98 061.51	101 298.18	98 061.51	101 298.18	

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

<sup>a</sup> Base year refers to the base year under the Kyoto Protocol, which is 1990 for CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O, 1995 for HFCs, PFCs and SF<sub>6</sub>, and 2000 for NF<sub>3</sub>.

<sup>b</sup> Emissions/removals reported in the sector other (sector 6) are not included in total GHG emissions.

<sup>c</sup> The Party has reported indirect CO<sub>2</sub> emissions in common reporting format table 6 as “NE, NO”.

Table 6

**Greenhouse gas emissions by gas for Greece, excluding land use, land-use change and forestry, 1990–2014<sup>a</sup>**

(kt CO<sub>2</sub> eq)

<i>Year</i>	<i>CO<sub>2</sub><sup>b</sup></i>	<i>CH<sub>4</sub></i>	<i>N<sub>2</sub>O</i>	<i>HFCs</i>	<i>PFCs</i>	<i>Unspecified mix of HFCs and PFCs</i>	<i>SF<sub>6</sub></i>	<i>NF<sub>3</sub></i>
1990	83 403.72	12 534.12	7 402.64	1 182.82	190.26	NA, NO	2.93	NA, NO
1995	86 980.65	12 830.01	6 669.81	4 157.38	62.85	NA, NO	3.42	NA, NO
2000	103 019.66	12 816.99	6 346.05	5 261.83	122.26	NA, NO	3.81	NA, NO
2010	97 035.08	11 540.64	5 526.83	4 388.67	129.44	NA, NO	5.86	NA, NO
2011	94 102.94	11 378.91	5 317.62	4 661.66	110.53	NA, NO	5.13	NA, NO
2012	90 710.57	11 249.21	4 912.06	5 061.78	147.77	NA, NO	5.05	NA, NO
2013	82 910.63	11 155.03	4 670.44	5 650.22	172.56	NA, NO	5.15	NA, NO
2014	79 628.27	11 086.14	4 686.09	5 758.13	134.63	NA, NO	4.92	NA, NO
<b>Per cent change 1990–2014</b>	<b>–4.5</b>	<b>–11.6</b>	<b>–36.7</b>	<b>386.8</b>	<b>–29.2</b>	<b>NA</b>	<b>68.0</b>	<b>NA</b>

*Abbreviations:* NA = not applicable, NO = not occurring.

<sup>a</sup> Emissions/removals reported in the sector other (sector 6) are not included in total greenhouse gas emissions.

<sup>b</sup> CO<sub>2</sub> emissions include indirect CO<sub>2</sub> emissions reported in common reporting format table 6 as “NE, NO”.

Table 7

**Greenhouse gas emissions by sector for Greece, 1990–2014<sup>a, b</sup>**(kt CO<sub>2</sub> eq)

<i>Year</i>	<i>Energy</i>	<i>IPPU</i>	<i>Agriculture</i>	<i>LULUCF</i>	<i>Waste</i>	<i>Other</i>
1990	76 914.70	11 226.96	10 075.32	–2 278.78	6 499.52	NO
1995	81 003.18	13 569.65	9 450.77	–2 895.13	6 680.50	NO
2000	96 742.40	15 176.38	9 112.24	–1 884.85	6 539.59	NO
2010	92 765.39	11 661.84	8 838.40	–3 260.71	5 360.89	NO
2011	91 467.72	10 320.16	8 632.63	–3 301.96	5 156.27	NO
2012	87 394.22	11 140.31	8 590.28	–3 246.83	4 961.62	NO
2013	78 867.41	11 974.28	8 679.90	–3 148.45	5 042.45	NO
2014	75 206.62	12 368.83	8 637.97	–3 236.67	5 084.76	–
<b>Per cent change 1990–2014</b>	<b>–2.2</b>	<b>10.2</b>	<b>–14.3</b>	<b>42.0</b>	<b>–21.8</b>	<b>NA</b>

*Abbreviations:* IPPU = industrial processes and product use, LULUCF = land use, land-use change and forestry, NA = not applicable, NO = not occurring.

<sup>a</sup> Emissions/removals reported in the sector other (sector 6) are not included in total greenhouse gas emissions.

<sup>b</sup> Greece did not report indirect CO<sub>2</sub> emissions in common reporting format table 6.

## Annex II

### Documents and information used during the review

#### A. Reference documents

“Guidelines for national systems for the estimation of anthropogenic greenhouse gas emissions by sources and removals by sinks under Article 5, paragraph 1, of the Kyoto Protocol”. Annex to decision 19/CMP.1. Available at <http://unfccc.int/resource/docs/2005/cmp1/eng/08a03.pdf#page=15>.

“Guidelines for the preparation of the information required under Article 7 of the Kyoto Protocol”. Annex to decision 15/CMP.1. Available at <http://unfccc.int/resource/docs/2005/cmp1/eng/08a02.pdf#page=56>.

“Guidelines for review under Article 8 of the Kyoto Protocol”. Annex to decision 22/CMP.1. Available at <http://unfccc.int/resource/docs/2005/cmp1/eng/08a03.pdf#page=51>.

“Guidelines for the preparation of national communications by Parties included in Annex I to the Convention, Part I: UNFCCC reporting guidelines on annual greenhouse gas inventories”. Annex I to decision 24/CP.19. Available at <http://unfccc.int/resource/docs/2013/cop19/eng/10a03.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 13/CP.20. Available at <http://unfccc.int/resource/docs/2014/cop20/eng/10a03.pdf#page=6>.

“Implications of the implementation of decisions 2/CMP.7 to 4/CMP.7 and 1/CMP.8 on the previous decisions on methodological issues related to the Kyoto Protocol, including those relating to Articles 5, 7 and 8 of the Kyoto Protocol, Part I: Implications related to accounting and reporting and other related issues”. Decision 3/CMP.11. Available at <http://unfccc.int/resource/docs/2015/cmp11/eng/08a01.pdf#page=5>.

“Implications of the implementation of decisions 2/CMP.7 to 4/CMP.7 and 1/CMP.8 on the previous decisions on methodological issues related to the Kyoto Protocol, including those relating to Articles 5, 7 and 8 of the Kyoto Protocol, Part II: Implications related to review and adjustments and other related issues”. Decision 4/CMP.11. Available at <http://unfccc.int/resource/docs/2015/cmp11/eng/08a01.pdf#page=30>.

Intergovernmental Panel on Climate Change. 2006. *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. Available at <http://www.ipcc-nggip.iges.or.jp/public/2006gl/index.html>.

Intergovernmental Panel on Climate Change. 2014. *2013 Revised Supplementary Methods and Good Practice Guidance Arising from the Kyoto Protocol*. Available at <http://www.ipcc-nggip.iges.or.jp/public/kpsg>.

Intergovernmental Panel on Climate Change. 2014. *2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Wetlands*. Available at <http://www.ipcc-nggip.iges.or.jp/public/wetlands/index.html>.

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

Responses to questions during the review were received from Mr. Dimitris Niavis (Ministry of Environment and Energy), including additional material on the methodology and assumptions used.



## Annex III

### Acronyms and abbreviations

CH <sub>4</sub>	methane
CMP	Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol
CO <sub>2</sub>	carbon dioxide
CO <sub>2</sub> eq	carbon dioxide equivalent
ERT	expert review team
FMRL	forest management reference level
GHG	greenhouse gas
ha	hectare
HFC	hydrofluorocarbon
IPPU	industrial processes and product use
kt	kilotonne
LULUCF	land use, land-use change and forestry
m	metre
Mt	megatonne
NA	not applicable
NE	not estimated
NF <sub>3</sub>	nitrogen trifluoride
NO	not occurring
N <sub>2</sub> O	nitrous oxide
PFC	perfluorocarbon
QELRC	quantified emission limitation and reduction commitment
SF <sub>6</sub>	sulphur hexafluoride
t	tonne
UNFCCC	United Nations Framework Convention on Climate Change

---