



# **ICELAND'S REPORT TO FACILITATE THE CALCULATION OF THE ASSIGNED AMOUNT**

*- pursuant to Article 3, paragraphs 7bis, 8 and 8bis of the Kyoto Protocol for CP2*

***Ministry for the Environment and Natural Resources/  
The Environment Agency of Iceland***

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# 1. Introduction

This report represents Iceland's report to facilitate the calculation of its assigned amount pursuant to Article 3, paragraphs 7bis, 8 and 8bis, of the Kyoto Protocol for the second commitment period and to demonstrate its capacity to account for its emissions and assigned amount in accordance with decision 2/CMP.8 under the Kyoto Protocol period.

The European Union, its Member States and Iceland have agreed to the immediate implementation of the Doha Amendment as of 1st January 2013, and to fulfil the commitments under the second commitment period of the Kyoto Protocol, jointly, see Council Decision (EU) 2015/1339.

The objective of this Report is to provide the information requested by the UNFCCC for the second commitment period of the Kyoto Protocol, as stated in Decision 2/CMP.8, and 3/CMP.11.

As the the quantified emission limitation and reduction commitment (QELRC) for the European Union, its member States and Iceland, will be fulfilled jointly in accordance with Article 4 of the Kyoto Protocol, the European Commission will submit to the UNFCCC secretariat a similar report to facilitate the calculation of the assigned amount for the European Union pursuant to Article 3, paragraphs 7bis, 8 and 8bis and Article 4, of the Kyoto Protocol for the second commitment period.

## 2. Calculation of Iceland's assigned amount

### 2.1 Greenhouse gas inventory

The complete inventories of anthropogenic emissions by sources and removals by sinks of the greenhouse gases (GHGs) not controlled by the Montreal Protocol, recalculated in accordance with Decision 4/CMP.7 for all years from 1990 to 2014, and prepared in accordance with Article 5, paragraph 2, of the Kyoto Protocol and relevant decisions of the Conference of the Parties serving as a the meeting of the Parties to the Kyoto Protocol (CMP) and the Conference of the Parties (COP), are provided in Iceland's National Inventory Report (NIR) 2016 and the related Common Reporting Format (CRF).

In Table 2.1 and Table 2.2 below is a summary table with Iceland's total GHG emission 1990 to 2014.

For further information on emissions data in the CRF and the required information on methods etc. please see Iceland's greenhouse gas inventory comprising the National Inventory Report (NIR) 2016 and Common Reporting Format (CRF) tables for the years 1990–2014.

Table 2.1 Greenhouse gas emissions by gas (kt CO<sub>2</sub>-eq.) Source: The 2016 Inventory Submission in CRF, 6 May 2016.

GREENHOUSE GAS EMISSIONS	Base year <sup>(1)</sup>	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Change from base to latest reported year
	CO <sub>2</sub> equivalent (kt)														(%)
CO <sub>2</sub> without net CO <sub>2</sub> from LULUCF	2106	2106	2300	2729	2797	2939	3237	3567	3522	3384	3299	3291	3302	3272	55.37
CO <sub>2</sub> with net CO <sub>2</sub> from LULUCF	9800	9800	9947	10449	10602	10815	11183	11573	11549	11366	11269	11276	11289	11252	14.82
CH <sub>4</sub> without CH <sub>4</sub> from LULUCF	522	522	540	559	562	589	591	587	583	584	566	546	546	592	13.56
CH <sub>4</sub> with CH <sub>4</sub> from LULUCF	2896	2896	2910	2905	2878	2898	2884	2869	2857	2856	2834	2809	2804	2847	-1.70
N <sub>2</sub> O without N <sub>2</sub> O from LULUCF	510	510	469	481	435	460	478	487	453	438	432	441	426	468	-8.25
N <sub>2</sub> O with N <sub>2</sub> O from LULUCF	1938	1938	1911	1964	1967	2015	2046	2072	2052	2039	2041	2060	2053	2102	8.50
HFCs	NO,NA	NO,NA	10	43	70	70	74	85	114	149	146	173	170	163	
PFCs	495	495	69	150	31	393	331	411	180	172	75	94	88	99	-79.98
SF <sub>6</sub>	1	1	1	1	3	3	3	3	3	5	3	5	3	2	102.09
NF <sub>3</sub>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
<b>Total (without LULUCF)</b>	<b>3634</b>	<b>3634</b>	<b>3389</b>	<b>3963</b>	<b>3898</b>	<b>4454</b>	<b>4715</b>	<b>5140</b>	<b>4856</b>	<b>4730</b>	<b>4520</b>	<b>4550</b>	<b>4535</b>	<b>4597</b>	<b>26.51</b>
<b>Total (with LULUCF)</b>	<b>15129</b>	<b>15129</b>	<b>14849</b>	<b>15512</b>	<b>15550</b>	<b>16194</b>	<b>16522</b>	<b>17013</b>	<b>16755</b>	<b>16587</b>	<b>16368</b>	<b>16417</b>	<b>16407</b>	<b>16466</b>	<b>8.83</b>
<b>Total (without LULUCF, with indirect)</b>	<b>3634</b>	<b>3634</b>	<b>3389</b>	<b>3963</b>	<b>3898</b>	<b>4454</b>	<b>4715</b>	<b>5140</b>	<b>4856</b>	<b>4730</b>	<b>4520</b>	<b>4550</b>	<b>4535</b>	<b>4597</b>	<b>26.51</b>
<b>Total (with LULUCF, with indirect)</b>	<b>15129</b>	<b>15129</b>	<b>14849</b>	<b>15512</b>	<b>15550</b>	<b>16194</b>	<b>16522</b>	<b>17013</b>	<b>16755</b>	<b>16587</b>	<b>16368</b>	<b>16417</b>	<b>16407</b>	<b>16466</b>	<b>8.83</b>

Table 2.2 Greenhouse gas emissions by sector (kt CO<sub>2</sub>-eq.). Source: The 2016 Inventory Submission in CRF, 6 May 2016).

GREENHOUSE GAS SOURCE AND SINK CATEGORIES	Base year <sup>(1)</sup>	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Change from base to latest reported year
	CO <sub>2</sub> equivalent (kt)														(%)
1. Energy	1738	1738	1911	2003	2026	2060	2158	2043	1977	1826	1740	1689	1674	1680	-3.35
2. Industrial processes and product use	948	948	561	1011	955	1425	1567	2100	1910	1945	1838	1930	1944	1914	101.85
3. Agriculture	780	780	708	719	674	706	728	745	721	713	711	718	688	748	-4.09
4. Land use, land-use change and forestry <sup>(5)</sup>	11496	11496	11460	11549	11652	11740	11807	11873	11899	11857	11848	11867	11872	11869	3.25
5. Waste	168	168	209	230	243	264	263	253	247	246	231	213	229	255	52.26
6. Other	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>Total (including LULUCF)<sup>(5)</sup></b>	<b>15129</b>	<b>15129</b>	<b>14849</b>	<b>15512</b>	<b>15550</b>	<b>16194</b>	<b>16522</b>	<b>17013</b>	<b>16755</b>	<b>16587</b>	<b>16368</b>	<b>16417</b>	<b>16407</b>	<b>16466</b>	<b>8.83</b>

## 2.2 Base year information

Table 2.3 below provides greenhouse gas emissions (in accordance with Annex A of the Kyoto Protocol) for the base year, for Iceland. Emissions exclude all emissions and removals associated with land use, land use change and forestry (LULUCF) in accordance with Article 7.4 modalities for the accounting of assigned amounts. LULUCF emissions and removals enter the table only through rows labelled Article 3.3 and Article 3.4.

Article 3.3 represents the net emissions or removals of Afforestation plus Reforestation minus Deforestation (ARD) since 1990

Article 3.4 represents the net emissions or removals due to revegetation since 1990 (Iceland has only elected revegetation as an activity under Art 3.4 – see Chapter 3 of the present report).

*Table 2.3 Iceland's base year information for the second commitment period under the Kyoto Protocol*

<b>Gg. CO<sub>2</sub> -equivalents</b>	<b>Total</b>
CO <sub>2</sub> (1990)	2 106
CH <sub>4</sub> (1990)	522
N <sub>2</sub> O(1990)	510
HFCs(1990)	NO
PFCs(1990)	495
SF <sub>6</sub> (1990)	1
NF <sub>3</sub> (1995)	NO
<b>Total Annex A emissions</b>	<b>3 634</b>
<b>Article 3.3</b>	<b>-</b>
<b>Article 3.4</b>	<b>-349</b>

### 2.2.1 Selected base year for CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O

The base year for carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O) is 1990 for the second commitment period.

### 2.2.2 Selected base year for HFCs, PFCs and SF<sub>6</sub>

For hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF<sub>6</sub>) Iceland has selected 1990 as the base year in accordance with the choice under Article 3, paragraph 8bis of the Kyoto Protocol.

### 2.2.3 Selected base year for NF<sub>3</sub>

In accordance with Article 3, paragraph 8bis, of the Kyoto Protocol Iceland has selected 1995 as the base year for nitrogen trifluoride (NF<sub>3</sub>) in the second commitment period.

## **2.3 Agreement under Article 4 of the Kyoto Protocol**

Upon adoption of the Doha Amendment to the Kyoto Protocol, Iceland stated the intention to fulfil its reduction target under the second commitment period, jointly with the European Union.

The ratification decision (Council Decision (EU) 2015/1339) sets out the terms of the joint fulfilment between the Union and its Member States and Iceland. The same terms are integral part of the Agreement between the European Union and its Member States, of the one part, and Iceland, of the other part, concerning Iceland's participation in the joint fulfilment of the commitments of the European Union, its Member States and Iceland in the second commitment period of the Kyoto Protocol in accordance with Council Decision (EU) 2015/1340.

The terms of the agreement between the European Union and its 28 Member states and Iceland to fulfil the individual commitments under Article 3 of the Kyoto Protocol jointly under Article 4 of the Kyoto Protocol for the second commitment period, can be found in Annex I of this report. This is in accordance with paragraph 1(c) in Annex I to Decision 2/CMP.8

## **2.4 Calculation of the assigned amount**

Pursuant to Article 3(7bis), (8) and (8bis) of the Kyoto Protocol and paragraph 2 of Annex I to document 3/CMP.11, the assigned amount for the second commitment period is equal to the percentage inscribed in the third column of Annex B of the Annex to the Doha amendment of the aggregate anthropogenic carbon dioxide equivalent emissions of greenhouse gases in the base year multiplied by eight, taking into account Article 3(7bis) of the Kyoto Protocol and paragraph 2 of the Annex to document 3/CMP.11.

This method of calculation is applied to the calculation of the joint assigned amount only. Paragraph 2 (c) does not apply to those parties that have reached an agreement in accordance with Article 4 to fulfil their commitments under Article 3 jointly. This is in accordance with Annex I to Decision 3/CMP.11. The calculations of Iceland's base year emissions do therefore not play a role in the calculation of the individual assigned amounts, which are instead determined pursuant to the Joint Fulfilment Agreement.

The respective assigned amounts of each Member State and Iceland are equal to the emission levels agreed under the terms of the joint fulfilment, listed in Annex 2 of the ratification decision (Council Decision (EU) 2015/1339), after the application of Article 3(7bis) of the Kyoto Protocol. The assigned amount of the European Union is the difference between the joint assigned amount and the sum of the assigned amounts of the Member States and Iceland. The assigned amount of the European Union shall be issued in the Kyoto registry of the European Union.

Iceland's individual assigned amount was established at 15 327 217 assigned amount units (AAUs), in accordance with the notification of the terms of the agreement to fulfil the commitment jointly by the European Union, its Member States, and Iceland (Council Decision (EU) 2015/1339).

The calculation of the total assigned amount for the EU, its 28 Member States and Iceland (EU28+ISL) is included in the European Union's report to facilitate the calculation of the assigned amount for the second commitment period.

## 2.5 Commitment period reserve

Parties are required by Decision 11/CMP.1 under the Kyoto Protocol and paragraph 18 of Decision 1/CMP.8 to establish and maintain a commitment period reserve as a part of their responsibility to manage and account for their assigned amount. According to Decision 11/CMP.1 each Party included in Annex I shall maintain, in its national registry, a commitment period reserve which should not drop below 90 per cent of the Party's assigned amount calculated pursuant to Article 3(7bis), (8) and (8bis) or 100 per cent of its most recently reviewed inventory, multiplied by 8, based on the lower value resulting from the two methods.

*Table 2.4 Calculation of Iceland's commitment period reserve*

	Number of Units
<b>Assigned Amount 2013-2020</b>	<b>15 327 217</b>
a) 90% of assigned amount	13 794 495
Most recently reviewed inventory <sup>1</sup> (2012)	4 467 730
b) 100% of 8 times most recently reviewed inventory	35 741 840
<b>Commitment period reserve (lowest of a and b)</b>	<b>13 794 495</b>

According to definition (a) Iceland's commitment period reserve would amount to 90 per cent of Iceland's assigned amount, which is equal to 13 794 495 tonnes of CO<sub>2</sub> equivalents (see Table 2.4).

According to definition (b) Iceland's commitment period reserve would amount to eight times the sum of the most recent reviewed greenhouse gas inventory, which is equal to 35 741 840 tonnes of CO<sub>2</sub> equivalents (see Table 2.4).

Iceland's commitment period reserve is therefore established in line with definition (a) amounting to 13 794 495 AAUs.

<sup>1</sup> <http://unfccc.int/resource/docs/2015/arr/isl.pdf>



### 3. Land use, land-use change and forestry (LULUCF)

This chapter describes the activities under Article 3, paragraph 3 and 4 of the Kyoto Protocol.

#### 3.1 Definitions relating to land use, land-use change and forestry activities

The following definitions are in accordance with Decision 13/CMP.1 Annex paragraph 8(b).

##### 3.1.1. Definitions of forest for activities under Article 3 and 3.4

Iceland's definitions of forest are identified as the following, in accordance with decision 16/CMP.1 adopted by the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol:

##### *Definitions of forest*

Minimum value for forest area: 0.5 ha

Minimum value for tree crown cover: 10%

Minimum value for tree height: 2 m

##### 3.1.2. Consistency of the definitions

Forest definitions are identical to forest definitions applied in the first commitment period of the Kyoto protocol. The rational is described below.

Forest definitions are consistent with those historically reported to and subsequently published by the Food and Agriculture Organisation (FAO) of the United Nations, with the exception of tree height.

In the Global Forest Resources Assessment 2005 (coordinated by FAO), countries are requested to use uniform forest definitions. Iceland uses these definitions for the minimum value for forest area and for tree crown cover.

Thresholds in forest definitions of the Marrakech Accord (MA), the UNEP Convention on Biological Diversity (CBD) and the Forest Resource Assessment (FAO/FRA) are listed in the table below.

Parameters	MA	CBD	FAO/FRA
Minimum area (ha)	0.05-1.0	0.5	0.5
Minimum height (m)	2-5	5	5
Crown cover (%)	10-30	10	10
Strip width (m)			20

The FAO definition will not be used for tree height in Iceland. Iceland will instead use 2 m as a minimum height at maturity. That is in agreement with the general perception in Iceland and the forest law that include all woodlands of native birch although only 12% of the native woodlands do reach 5 m height. To define bigger part of the native woodland as an ARD activity under the Kyoto

Protocol will promote use of native species in afforestation and prevent deforestation of native woodlands.

## **3.2 Information on election of activities under Article 3.4 (in accordance with Decision 13/CMP.1 Annex paragraph 8(c))**

### **3.2.1 Election of activities under Article 3.4**

Iceland elects Revegetation as defined by decision 16/CMP.1 annex paragraph 6 as “additional human activities related to changes in greenhouse gas by source and removals by sinks in the agricultural soils and the land-use change and forestry categories”, defined by Article 3, paragraph 4 of the Kyoto Protocol.

### **3.2.2 Interpretation of elected activities under Article 3.4**

Revegetation is defined by decision 16/CMP.1 annex paragraph 1(e) as “a direct human-induced activity to increase carbon stocks on sites through the establishment of vegetation that covers a minimum area of 0.05 hectares and does not meet the definitions of afforestation and reforestation”.

Iceland interprets the definition of Revegetation as follows, recalling the LULUCF-Good Practice Guidance:

- A direct human-induced activity to increase carbon stocks on eroding **or** eroded/desertified sites through the establishment of vegetation or the reinforcement of existing vegetation that covers a minimum area of 0.5 hectares and does not meet the definitions of afforestation and reforestation.

### **3.2.3 Hierarchy among the elected activities under Article 3.4**

Revegetation is the only activity elected by Iceland under article 3.4, therefore hierarchy among activities is not applicable.

## **3.3 Land identification method in accordance with Article 5.1**

LULUCF-Good Practice Guidance, page 4.24, section 4.2.2.2 shows the two methods for identifying and reporting land subject to Article 3.3 and Article 3.4 activities. Reporting Method 1 entails delineating areas that include multiple land units subject to Article 3.4 activities by using legal, administrative, or ecosystem boundaries. Reporting Method 2 is based on the spatially explicit and complete geographical identification of all land subject to Article 3.3 activities and all land subject to Article 3.4 activities.

Iceland elects Reporting Method 1.

## **3.4 Information on accounting of credits (in accordance with Decision 13/CMP.1 Annex paragraph 8(d))**

Credits issued by activities under Article 3, paragraph 3 and 4 of the Kyoto Protocol will be accounted for the entire commitment period.

### **3.5 Selection of annual or end-of-period accounting for each 3.3, 3.4 activity**

Iceland has elected to account for LULUCF activities at the end of the commitment period.

### **3.6 Forest management reference level and related info**

The forest management reference level is 154.00 Gg CO<sub>2</sub> eq.

Iceland will apply the provisions in paragraph 33 of the Annex to Decision 2.CPM 7 for both Afforestation/Reforestation under Article 3(3) and for Forest Management under Article 3(4).

### **3.7 Natural disturbances**

Iceland intends to apply the provisions to exclude emissions from natural disturbances (ND) for the accounting of afforestation and reforestation under Article 3.3 and forest management under Article 3.4 during the second commitment period of the Kyoto Protocol.

The reasons for doing so are:

- **Wildfires:** The likelihood of forest wildfire are rising with increasing area of forest land due to afforestation, increasing biomass fuel in forest with increasing age of afforestation areas, besides increasing area and biomass fuel in natural birch woodland. From 1990 the area of forest (defined > 5 m height at maturity) has increased from 16.1 to 49.2 kha in 2015 (FRA2015). The biomass stock above ground has in same period increased from 0.26 to 1.00 million metric tonnes. Same figures of Other wooded land were 122.3 to 144.2 kha and 1.72 to 2.10 million metric tonnes. The catastrophic event in the spring of 2006 when 6700 ha of grassland and wetland burned in one event was an example of what can happen although wildfires are seldom in Iceland. The Icelandic Institute of Natural History and Westfjords Natural History Institute have mapped wildfires in Iceland since the 2006 wildfire. In the period 2007-2015 15 wildfires have occurred, with burnt area of 543 ha. Seven sites of together 29 ha were partly covered with forest. Only two of these events are of a size (bigger than 0.5 ha) to be reported in the UNFCCC-CRF, in 2010 and 2013. In 2015 a law about prohibition of igniting open fire, restriction of controlled burning of grassland and of protections against wildfires was legislated.
- **Extreme weather events:** The likelihood of windthrow are rising with increasing age and height of the cultivated forest. As thinning has started in the cultivated forest risk of windthrow is escalating. Until now windthrows have been minimal but steadily increasing while without catastrophic events.
- **Insect pests and disease infestations:** Catastrophic biotic damages of insect outbreaks or tree diseases has occurred once in the history of afforestation in Iceland. As only one tree species, mountain birch (*Betula pubescens*), forms forests in Iceland the afforestation is depended on introduced tree species. In the 1960s plantations of introduced Scottish pine (*Pinus sylvestris*) were attacked by pine aphid (*Pineus pini*) that in short time did eradicate all Scottish pine plantations of 2 million seedlings, approximately 400 – 500 ha. When practicing forestry with introduced tree species in an isolated area as Iceland it is always a certain risk even for the native species to get a catastrophic event with insects or tree diseases.

- Geological disturbances: It is possible while unlikely that a volcanic eruption could lead to massive eradication of forests.

### **3.7.1 Country specific information on the background levels of emissions associated with annual natural disturbances that have been included in its forest management reference level**

Natural disturbances as described above have not been included in the forest management reference level. On the other hand minor natural disturbances are indirectly incorporated in the national forest inventory data as they affect the net growth of the forest in general.

### **3.7.2 Information on how the background levels have been estimated**

As only two very small events of natural disturbances have occurred in forests since 1990 it is not possible to estimate a background level for natural disturbances by the methodology described in the 2013 KP Supplement.

Iceland only intends to exclude emissions from ND of catastrophic size that heavily will affect the normal emission/removal account and can clearly been identified and mapped and measured for amount of emission. Smaller ND events and/or with diffuse effect will not be accounted for and will, as before be encompassed in the net emission/removal figure of ARD and FM.

## 4. Iceland's national system

As Iceland did have a quantified emission limitation in the first commitment period, and a description of Iceland's national system for GHG inventories in accordance with Article 5, paragraph 1, of the Kyoto Protocol was reported in accordance with the "Guidelines for the preparation of the information required under Article 7 of the Kyoto Protocol" for the first commitment period of the Kyoto Protocol. The original description of the national system, is available in Iceland's Initial Report for the first commitment period of the Kyoto Protocol. Subsequent updates to Iceland's national system are described in Iceland's 2016 National Inventory Report.

In accordance with paragraph 1(l) in Annex I to Decision 2/CMP.8 a description of the national system is not included in this report.

## 5. Iceland's national registry

A description of the Icelandic national registry, reported in accordance with the "Guidelines for the preparation of the information required under Article 7 of the Kyoto Protocol", was established for the first commitment period of the Kyoto Protocol. The original description of the national registry, is available in Iceland's Initial Report for the first commitment period of the Kyoto Protocol. Subsequent updates to Iceland's national registry are described in Iceland's 2016 National Inventory Report.

In accordance with paragraph 1(l) in Annex I to Decision 2/CMP.8 a description of the national registry is not included in this report.

# Annex I

## **Notification of the terms of the agreement to fulfil jointly the commitments of the European Union, its Member States and Iceland under Article 3 of the Kyoto Protocol for the second commitment period of the Kyoto Protocol.**

### 1. Members of the agreement

The European Union, its Member States and the Republic of Iceland, each being Parties to the Kyoto Protocol, are the members of this agreement ("the members"). The following are at present Member States of the European Union:

the Kingdom of Belgium, the Republic of Bulgaria, the Czech Republic, the Kingdom of Denmark, the Federal Republic of Germany, the Republic of Estonia, Ireland, the Hellenic Republic, the Kingdom of Spain, the French Republic, the Republic of Croatia, the Italian Republic, the Republic of Cyprus, the Republic of Latvia, the Republic of Lithuania, the Grand Duchy of Luxembourg, Hungary, the Republic of Malta, the Kingdom of the Netherlands, the Republic of Austria, the Republic of Poland, the Portuguese Republic, Romania, the Republic of Slovenia, the Slovak Republic, the Republic of Finland, the Kingdom of Sweden, and the United Kingdom of Great Britain and Northern Ireland.

Iceland is a member of this agreement pursuant to the Agreement between the European Union and its Member States and Iceland concerning Iceland's participation in the joint fulfilment of the commitments of the European Union, its Member States and Iceland for the second commitment period of the Kyoto Protocol to the United Nations Framework Convention on Climate Change.

### 2. Joint fulfilment of the commitments under Article 3 of the Kyoto Protocol for the second commitment period of the Kyoto Protocol

In accordance with Article 4(1) of the Kyoto Protocol, the members will fulfil their commitments under Article 3 thereof as follows:

- the members will ensure that, in accordance with Article 4(5) and (6) of the Kyoto Protocol, in the Member States and Iceland the combined sum of the aggregate anthropogenic carbon dioxide equivalent emissions of the greenhouse gases listed in Annex A to the Kyoto Protocol does not exceed their joint assigned amount;
- the application of Article 3(1) of the Kyoto Protocol to greenhouse gas emissions from aviation and shipping for the Member States and Iceland is based on the Convention's approach of only including emissions from domestic flights and domestic shipping in Parties' targets. The European Union approach under the second commitment of the Kyoto Protocol

will remain the same as that of the first commitment period, given the lack of progress since Decision 2/CP.3 in attributing those emissions to Parties' targets. This is without prejudice to the stringency of the European Union's commitments under the climate and energy package, which remain unchanged. It is also without prejudice to the need to take measures concerning emissions of such gases from aviation and marine bunker fuels;

- each member may increase its ambition level by transferring assigned amount units, emission reduction units or certified emission reduction units to a cancellation account established in its national registry. The members will jointly submit the information required by paragraph 9 of Decision 1/CMP.8, and will jointly make any proposals for the purpose of Article 3(1ter) and (1quater) of the Kyoto Protocol;
- the members will continue to apply Article 3(3) and (4) of the Kyoto Protocol and decisions agreed thereunder individually;
- the combined base year emissions of the members will equal the sum of emissions in the respective base years applicable to each Member State and Iceland;
- if land use, land-use change and forestry constituted a net source of greenhouse gas emissions in 1990 for any Member State or Iceland, the relevant member shall, pursuant to Article 3(7bis) of the Kyoto Protocol, include in its emissions base year or period the aggregate anthropogenic carbon dioxide equivalent emissions by sources minus removals by sinks in the base year or period from land use, land-use change and forestry for the purpose of calculating the joint assigned amount of the members determined in accordance with Article 3 (7bis), (8) and (8bis) of the Kyoto Protocol;
- the calculation pursuant to Article 3(7ter) of the Kyoto Protocol shall apply to the joint assigned amount of the second commitment period for the members determined in accordance with Article 3 (7bis), (8) and (8bis) of the Kyoto Protocol and the sum of the average annual emissions of the members for the first three years of the first commitment period multiplied by eight;
- in accordance with Decision 1/CMP.8, units in a member's Previous Period Surplus Reserve account may be used for retirement during the additional period for fulfilling commitments of the second commitment period, up to the extent by which that member's emissions during the second commitment period exceed its respective assigned amount for that commitment period, as defined in this notification.

3. Respective emission levels allocated to the members to the agreement

The quantified emission limitation and reduction commitments for the members listed in the third column of Annex B to the Kyoto Protocol are 80 %. The joint assigned amount of the members for the second commitment period will be determined pursuant to Article 3(7 bis), (8) and (8 bis) of the Kyoto Protocol, and its calculation will be facilitated by the report submitted by the European Union pursuant to paragraph 2 of Decision 2/CMP.8.

The respective emission levels of the members are as follows:



- The emission level for the European Union is the difference between the joint assigned amount of the members, and the sum of the emission levels of the Member States and Iceland. Its calculation will be facilitated by the report submitted pursuant to paragraph 2 of Decision 2/CMP.8.
- The respective emission levels of the Member States and Iceland in accordance with Article 4(1) and (5) of the Kyoto Protocol are the sum of their respective amounts listed in Table 1 below and any results of the application of the second sentence of Article 3(7bis) of the Kyoto Protocol for that Member State or Iceland. The assigned amounts of the members shall be equal to their respective emission levels. The assigned amount of the European Union will be counted against the emissions of greenhouse gases from sources under the European Union Emissions Trading Scheme, in which its Member States and Iceland participate, to the extent that those emissions are covered under the Kyoto Protocol. The respective assigned amounts of the Member States and Iceland cover the greenhouse gas emissions by sources and removals by sinks in each Member State or Iceland from sources and sinks not covered by Directive 2009/29/EC of the European Parliament and of the Council amending Directive 2003/87/EC so as to improve and extend the greenhouse gas emission allowance trading scheme of the Community. This includes all emissions by sources and removals by sinks covered by Article 3(3) and (4) of the Kyoto Protocol as well as all emissions of nitrogen 15 trifluoride (NF<sub>3</sub>) under the Kyoto Protocol.

Members of this agreement shall report separately on the emissions by sources and removals by sinks covered by their respective assigned amounts.

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**Table 1. Emission levels of the Member States and Iceland (before application of Article 3(7bis)) in terms of tonnes of carbon dioxide equivalent for the second commitment period of the Kyoto Protocol.**

<b>Belgium</b>	584 228 513
<b>Bulgaria</b>	222 945 983
<b>The Check republic</b>	520 515 203
<b>Denmark</b>	269 321 526
<b>Germany</b>	3 592 699 888
<b>Estonia</b>	51 056 976
<b>Ireland</b>	343 467 221
<b>Greece</b>	480 791 166
<b>Spain</b>	1 766 877 232
<b>France</b>	3 014 714 832
<b>Croatia</b>	162 271 086
<b>Italy</b>	2 410 291 421
<b>Cyprus</b>	47 450 128
<b>Latvia</b>	76 633 439
<b>Lithuania</b>	113 600 821
<b>Luxembourg</b>	70 736 832
<b>Hungary</b>	434 486 280

<b>Malta</b>	9 299 769
<b>Netherlands</b>	919 963 374
<b>Austria</b>	405 712 317
<b>Poland</b>	1 583 938 824
<b>Portugal</b>	402 210 711
<b>Rumania</b>	656 059 490
<b>Slovenia</b>	99 425 782
<b>Slovakia</b>	202 268 939
<b>Finland</b>	240 544 599
<b>Sweden</b>	315 554 578
<b>United Kingdom</b>	2 743 362 625
<b>Iceland</b>	15 327 217