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**COMPLIANCE COMMITTEE**

**CC/2018/2  
21 September 2018**

**Annual compilation and accounting report for  
Annex B Parties under the Kyoto Protocol  
for 2018**

**Note by the secretariat**

The annual compilation and accounting report for Annex B Parties under the Kyoto Protocol and the addendum to this report were published on 20 September 2017. For purposes of rule 10, paragraph 2, of the rules of procedure of the Compliance Committee (annex to decision 4/CMP.2, as amended by decisions 4/CMP.4 and 8/CMP.9), the report and its addendum are considered received by the secretariat on the same date. This report, FCCC/KP/CMP/2018/5 and its addendum, FCCC/KP/CMP/2018/5/Add.1, contained in the annex to this note, are being forwarded to the Compliance Committee in accordance with paragraph 4 of decision 13/CMP.1.



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**Conference of the Parties serving as the meeting  
of the Parties to the Kyoto Protocol**

**Fourteenth session**

**Katowice, 2–14 December 2018**

Item X of the provisional agenda

**Annual compilation and accounting report for Annex B  
Parties under the Kyoto Protocol for 2018**

**Note by the secretariat**

*Summary*

The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol, by decision 13/CMP.1, requested the secretariat to begin publishing annual compilation and accounting reports after completion of the initial review under Article 8 of the Kyoto Protocol and resolution of any questions of implementation. This report contains: key initial accounting parameters, based on the reports on the review of the reports to facilitate the calculation of the assigned amount for the second commitment period of the Kyoto Protocol, where available; information on transactions and holdings of Kyoto Protocol units reported in 2018; and data on greenhouse gas emissions for Parties included in Annex I<sup>1</sup> with commitments inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol as contained in annex I to decision 1/CMP.8. The information contained in this report is based on both final values (from the reviews of the 2017 annual submissions and of the reports to facilitate the calculation of the assigned amount for the second commitment period, where available) and provisional values (from the 2018 annual submissions and the reports to facilitate the calculation of the assigned amount for the second commitment period, both as reported by Parties). The final values will be made available upon completion of the associated reviews and the resolution of any questions of implementation.

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## I. Introduction

### A. Mandate

1. Parties to the Convention that are also Parties to the Kyoto Protocol with commitments inscribed in Annex B to the Kyoto Protocol (Annex B Parties) were required to start reporting supplementary information under Article 7, paragraph 1, of the Kyoto Protocol with the inventory submission due under the Convention for the first year of the commitment period after the Kyoto Protocol had entered into force for that Party.<sup>1</sup> The information reported shall include the following:

(a) Greenhouse gas (GHG) emissions from the sources listed in Annex A to the Kyoto Protocol, submitted as part of the annual GHG inventory;

(b) Anthropogenic GHG emissions by sources and removals by sinks from land use, land-use change and forestry (LULUCF) activities under Article 3, paragraph 3, forest management under Article 3, paragraph 4, and any other elected activities under Article 3, paragraph 4, of the Kyoto Protocol;

(c) Transactions and holdings of Kyoto Protocol units: emission reduction units (ERUs), certified emission reductions (CERs), temporary certified emission reductions, long-term certified emission reductions, assigned amount units (AAUs) and removal units.

2. The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (CMP), by decision 13/CMP.1 in conjunction with decision 3/CMP.11, requested the secretariat to publish annual compilation and accounting reports after completion of the initial review under Article 8 of the Kyoto Protocol and resolution of any questions of implementation relating to adjustments under Article 5, paragraph 2, of the Kyoto Protocol or to the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment to the Kyoto Protocol (annex I to decision 1/CMP.8) (hereinafter referred to as the Doha Amendment), and to forward the report to the CMP, the Compliance Committee and each Party concerned.

### B. Scope of the note

3. This annual compilation and accounting report has been prepared prior to the completion of the review of all reports to facilitate the calculation of the assigned amount for the second commitment period (hereinafter referred to as the initial reports) under Article 8 of the Kyoto Protocol and the resolution of any questions of implementation relating to adjustments under Article 5, paragraph 2, of the Kyoto Protocol or to the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment.

4. This report covers information reported by all 38 Annex B Parties and reviewed as at 31 August 2018,<sup>2</sup> including information on the initial accounting parameters for the second commitment period of the Kyoto Protocol and relevant supplementary information reported under Article 7, paragraph 1, of the Kyoto Protocol. The report also includes an overview of the information reported by Parties in 2018 on: (1) total GHG emissions from the sources listed in Annex A to the Kyoto Protocol reported for 2015 and 2016; (2) GHG emissions and removals from LULUCF activities under Article 3, paragraph 3, forest management under Article 3, paragraph 4, and any other elected activities under Article 3, paragraph 4, of the

<sup>1</sup> Decision 15/CMP.1 in conjunction with decision 3/CMP.11, paragraph 2.

<sup>2</sup> The accounting parameters presented in this report are based on the final values available in the initial review reports published as at 31 August 2018; where initial review reports had not been published, the accounting parameters are based, where available, on the provisional values contained in the initial reports for the second commitment period as reported by Parties. Similarly, where the review of annual information submitted by Parties had been completed, the associated values are presented as final, and where it is still pending, the values are provisional.

Kyoto Protocol for 2015 and 2016; and (3) transactions and holdings of Kyoto Protocol units as at 31 December 2017.

5. Information is also provided in this report on the eligibility of the 38 Annex B Parties to participate in the flexibility mechanisms under the Kyoto Protocol.

6. Detailed information on assigned amounts of individual Annex B Parties and other accounting information provided under the Kyoto Protocol, where applicable, is contained in document FCCC/KP/CMP/2018/5/Add.1, which also contains relevant information reported in accordance with decision 2/CMP.8, paragraph 4, and decision 3/CMP.11, paragraph 14, and other information reported on a voluntary basis by Parties included in Annex I<sup>3</sup> that do not have commitments inscribed in the third column of Annex B in the Doha Amendment (Japan, New Zealand and Russian Federation).

7. The initial reports, initial review reports and annual submissions of GHG inventories and accounting information reported by Parties are available on the UNFCCC website.<sup>4</sup>

## C. Possible action by the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol

8. The CMP may wish to take note of the information contained in this document and to take further action, if required.

## II. Status of reporting and eligibility

### A. Status of initial report submissions, annual submissions and the review process

9. As at 31 August 2018, 37 Annex B Parties<sup>5</sup> had submitted their initial reports in accordance with decision 2/CMP.8, for which the review reports (following the technical review conducted in accordance with the “Guidelines for review under Article 8 of the Kyoto Protocol”<sup>6</sup>) for 36 Parties had been published (the dates of submission of the former and publication of the latter are shown in table 1).

Table 1

**Status of submission of reports to facilitate the calculation of the assigned amount for the second commitment period of Annex B Parties and publication of initial review reports**

<i>Annex B Party</i>	<i>Doha Amendment acceptance date</i>	<i>Second commitment period initial report original submission date</i>	<i>Second commitment period initial review report publication date</i>
Australia	9 November 2016	7 May 2016	26 April 2017
Austria	21 December 2017	15 June 2016	31 May 2017
Belarus <sup>a</sup>	—	—	—
Belgium	14 November 2017	15 June 2016	20 June 2017
Bulgaria	21 December 2017	27 May 2016	21 June 2017
Croatia	21 December 2017	15 June 2016	28 March 2017
Cyprus	10 December 2015	15 June 2016	20 October 2017
Czechia	21 December 2017	15 June 2016	31 August 2017
Denmark	21 December 2017	15 June 2016	9 August 2017
Estonia	21 December 2017	15 June 2016	22 March 2017
European Union	21 December 2017	23 September 2016	14 May 2018
Finland	16 November 2017	29 June 2016	15 March 2017

<sup>3</sup> The term “Party included in Annex I” is defined in Article 1, paragraph 7, of the Kyoto Protocol.

<sup>4</sup> See <https://unfccc.int/process/transparency-and-reporting/reporting-and-review-under-the-kyoto-protocol/second-commitment-period/initial-reports> and <https://unfccc.int/process-and-meetings/transparency-and-reporting/reporting-and-review-under-the-convention/greenhouse-gas-inventories-annex-i-parties/national-inventory-submissions-2018>.

<sup>5</sup> As at 31 August 2018, Belarus had not yet submitted its initial report.

<sup>6</sup> Decision 22/CMP.1, annex, in conjunction with decision 4/CMP.11.

<i>Annex B Party</i>	<i>Doha Amendment acceptance date</i>	<i>Second commitment period initial report original submission date</i>	<i>Second commitment period initial review report publication date</i>
France	30 November 2017	16 June 2016	26 July 2017
Germany	14 November 2017	15 June 2016	12 April 2017
Greece	21 December 2017	15 June 2016	31 August 2017
Hungary	1 October 2015	15 June 2016	8 March 2017
Iceland	7 October 2015	19 September 2016	29 March 2017
Ireland	21 December 2017	17 June 2016	20 July 2017
Italy	18 July 2016	15 April 2016	31 May 2017
Kazakhstan	–	4 July 2017	–
Latvia	21 December 2017	15 June 2016	7 March 2017
Liechtenstein	23 February 2015	15 April 2016	21 September 2017
Lithuania	22 November 2017	16 June 2016	6 March 2017
Luxembourg	21 September 2017	1 August 2016	30 August 2017
Malta	21 December 2017	29 July 2016	21 July 2017
Monaco	27 December 2013	4 August 2017	23 March 2018
Netherlands	22 November 2017	15 June 2016	23 June 2017
Norway	12 June 2014	15 April 2016	27 March 2017
Poland	–	14 June 2016	20 June 2017
Portugal	22 November 2017	15 June 2016	5 September 2017
Romania	3 May 2016	15 June 2016	21 June 2017
Slovakia	16 November 2017	15 June 2016	3 March 2017
Slovenia	21 December 2017	15 June 2016	22 August 2017
Spain	14 November 2017	13 June 2016	14 July 2017
Sweden	14 November 2017	15 June 2016	6 April 2017
Switzerland	28 August 2015	15 April 2016	19 April 2017
Ukraine	–	10 June 2016	19 April 2017
United Kingdom	17 November 2017	1 July 2016	4 December 2017

<sup>a</sup> Party had not yet submitted its initial report as at 31 August 2018.

10. As at 31 August 2018, all 38 Annex B Parties had submitted the common reporting format table component of their 2018 annual GHG inventory, with 37 Parties<sup>7</sup> also having submitted their national inventory report. Thirty-seven Parties had also submitted information on GHG emissions and removals from LULUCF activities under Article 3, paragraph 3, forest management under Article 3, paragraph 4, and elected activities under Article 3, paragraph 4, of the Kyoto Protocol.<sup>8</sup>

11. As at 31 August 2018, 36 Annex B Parties had also submitted standard electronic format (SEF) tables for the period from 1 January to 31 December 2017.<sup>9</sup>

## B. Status of eligibility

12. The status of eligibility of Annex B Parties to participate in the flexibility mechanisms under the Kyoto Protocol pursuant to decisions 3/CMP.1, 9/CMP.1, 11/CMP.1, 15/CMP.1 and 1/CMP.8 is provided in table 2.

13. The status of eligibility will be updated in the compilation and accounting database once the annual review of the relevant information reported in 2018 has been completed and any questions of implementation have been resolved.

<sup>7</sup> Kazakhstan had not yet submitted its national inventory report as at 31 August 2018.

<sup>8</sup> Belarus had not yet submitted such information as at 31 August 2018.

<sup>9</sup> As at 31 August 2018, Belarus and Kazakhstan had not yet submitted SEF tables for the second commitment period of the Kyoto Protocol for the period from 1 January to 31 December 2017.

Table 2  
**Status of eligibility of Annex B Parties to participate in the Kyoto Protocol mechanisms**

<i>Annex B Party</i>	<i>Status</i>	<i>Last change in eligibility status (date and time)<sup>a</sup></i>
Australia	E	11 July 2009, 00:00:01
Austria	E	5 April 2008, 00:00:01
Belarus <sup>b</sup>	—	—
Belgium	E	22 April 2008, 00:00:01
Bulgaria	E	4 February 2011, 15:42:12
Croatia	E	8 February 2012, 09:53:32
Cyprus <sup>b</sup>	—	—
Czechia	E	24 February 2008, 00:00:01
Denmark	E	20 April 2008, 00:00:01
Estonia	E	15 April 2008, 00:00:01
European Union	E	18 April 2008, 00:00:01
Finland	E	22 April 2008, 00:00:01
France	E	21 April 2008, 00:00:01
Germany	E	27 April 2008, 00:00:01
Greece	E	14 November 2008, 09:00:00
Hungary	E	30 December 2007, 00:00:01
Iceland	E	11 May 2008, 00:00:01
Ireland	E	19 April 2008, 00:00:01
Italy	E	19 April 2008, 00:00:01
Kazakhstan <sup>b</sup>	—	—
Latvia	E	29 April 2008, 00:00:01
Liechtenstein	E	22 April 2008, 00:00:01
Lithuania	E	24 October 2012, 10:47:02
Luxembourg	E	29 April 2008, 00:00:01
Malta <sup>b</sup>	—	—
Monaco	E	7 September 2008, 00:00:01
Netherlands	E	21 April 2008, 00:00:01
Norway	E	22 April 2008, 00:00:01
Poland	E	29 April 2008, 00:00:01
Portugal	E	28 April 2008, 00:00:01
Romania	E	13 July 2012, 12:42:59
Slovakia	E	4 February 2008, 00:00:01
Slovenia	E	22 April 2008, 00:00:01
Spain	E	19 April 2008, 00:00:01
Sweden	E	19 April 2008, 00:00:01
Switzerland	E	10 March 2008, 00:00:01
Ukraine	E	9 March 2012, 15:32:22
United Kingdom	E	11 April 2008, 00:00:01

*Abbreviation:* E = considered to meet the eligibility requirements under: Article 6 of the Kyoto Protocol, pursuant to decision 9/CMP.1, annex, paragraph 22; Article 12, pursuant to decision 3/CMP.1, annex, paragraph 32; and Article 17, pursuant to decision 11/CMP.1, annex, paragraph 3.

<sup>a</sup> All times are in Greenwich Mean Time.

<sup>b</sup> The eligibility of the Party to participate in the flexibility mechanisms under the Kyoto Protocol had not been established as at 31 August 2018. See decision 1/CMP.8 in conjunction with decision 11/CMP.1, annex, paragraphs 2 and 3; decision 9/CMP.1, annex, paragraphs 21 and 22; and decision 3/CMP.1, annex, paragraphs 31 and 32.

### III. Main accounting parameters

#### A. Key initial accounting parameters

14. Table 3 shows the base years chosen for the accounting of fluorinated gases (i.e. hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF<sub>6</sub>) and nitrogen

trifluoride (NF<sub>3</sub>)), the GHG emissions from the sources listed in Annex A to the Kyoto Protocol in the base year, and the assigned amounts established pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment.

**1. Total base-year greenhouse gas emissions used for calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment**

15. Article 3, paragraphs 8 and 8 bis, in the Doha Amendment allow any Party included in Annex I to use 1995 as its base year for HFCs, PFCs and SF<sub>6</sub> and 1995 or 2000 as the base year for total emissions of NF<sub>3</sub> for the purpose of calculating its assigned amount pursuant to Article 3, paragraph 7 bis, in the Doha Amendment. The European Union has multiple base years (1990, 1995 or 2000) for fluorinated gases, depending on the base year elected by the individual member States and Iceland.

16. The total GHG emissions of 37 Annex B Parties<sup>10</sup> in the base year<sup>11</sup> amounted to 7,875.5 million tonnes of carbon dioxide equivalent (Mt CO<sub>2</sub> eq), including total GHG emissions of 7,721.8 Mt CO<sub>2</sub> eq from the sources listed in Annex A to the Kyoto Protocol and emissions from LULUCF (net emissions and removals in the base year from the conversion of forests (deforestation) of 153.7 Mt CO<sub>2</sub> eq.

Table 3

**Base-year emissions and assigned amounts for the second commitment period of the Kyoto Protocol**

Party	Base year defined under the Kyoto Protocol <sup>a</sup>			Base-year emissions <sup>b</sup> (t CO <sub>2</sub> eq)	Emission reduction/ limitation target (% of base-year level <sup>c</sup> )	Assigned amount (t CO <sub>2</sub> eq)
	CO <sub>2</sub> , CH <sub>4</sub> and N <sub>2</sub> O	HFCs, PFCs and SF <sub>6</sub>	NF <sub>3</sub>			
Australia	1990	1990	1990	566 786 410	99.5	4 511 619 826
Austria	1990	1990	2000	78 855 136	80.0	405 712 317
Belarus <sup>d</sup>	—	—	—	—	—	—
Belgium	1990	1995	1995	147 811 094	80.0	584 228 513
Bulgaria	1988	1995	1995	114 105 323	80.0	222 945 983
Croatia	1990	1990	2000	31 204 631	80.0	162 271 086
Cyprus	1990	1995	1995	5 627 236	80.0	47 450 128
Czechia	1990	1995	1995	198 316 406	80.0	520 515 203
Denmark	1990	1995	1995	70 801 910	80.0	269 377 890
Estonia	1990	1995	1995	39 996 697	80.0	51 056 976
European Union <sup>e, f</sup>	1990	1990 or 1995	1995 or 2000	5 875 692 700	80.0	15 813 089 338
Finland	1990	1995	1995	71 350 147	80.0	240 544 599
France	1990	1990	1995	548 055 757	80.0	3 014 714 832
Germany	1990	1995	1995	1 253 599 336	80.0	3 592 699 888
Greece	1990	1995	2000	107 564 136	80.0	480 791 166
Hungary	1985– 1987	1995	1995	109 574 819	80.0	434 486 280
Iceland	1990	1990	1995	3 633 558	80.0	15 327 217
Ireland	1990	1995	1995	56 425 830	80.0	343 519 892
Italy	1990	1990	1995	521 920 601	80.0	2 410 291 421
Kazakhstan <sup>g</sup>	1990	1995	2000	389 104 468	95.0	2 957 193 957
Latvia	1990	1995	1995	26 409 077	80.0	76 633 439
Liechtenstein	1990	1990	1990	231 554	84.0	1 556 044
Lithuania	1990	1995	1995	48 196 540	80.0	113 600 821
Luxembourg	1990	1995	1995	13 141 245	80.0	72 454 473
Malta	1990	1990	1995	1 974 638	80.0	9 299 769
Monaco	1990	1995	1990	99 319	78.0	619 751

<sup>10</sup> The total includes the emissions of the European Union but excludes the emissions of the individual European Union member States and Iceland, in order to avoid double counting.

<sup>11</sup> The total GHG emissions in the base year refers to the total GHG emissions that were used for the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment.



Party	Base year defined under the Kyoto Protocol <sup>a</sup>			Base-year emissions <sup>b</sup> (t CO <sub>2</sub> eq)	Emission reduction/ limitation target (% of base-year level <sup>c</sup> )	Assigned amount (t CO <sub>2</sub> eq)
	CO <sub>2</sub> , CH <sub>4</sub> and N <sub>2</sub> O	HFCs, PFCs and SF <sub>6</sub>	NF <sub>3</sub>			
Netherlands	1990	1995	1995	223 950 669	80.0	924 777 902
Norway	1990	1990	2000	51 921 771	84.0	348 914 303
Poland	1988	1995	2000	580 020 010	80.0	1 583 938 824
Portugal	1990	1995	2000	65 028 094	80.0	429 581 969
Romania	1989	1989	2000	304 920 568	80.0	656 059 490
Slovakia	1990	1990	2000	74 271 511	80.0	202 268 939
Slovenia	1986	1995	1995	20 327 584	80.0	99 425 782
Spain	1990	1995	1995	283 361 698	80.0	1 766 877 232
Sweden	1990	1995	1995	72 057 123	80.0	315 554 578
Switzerland	1990	1990	1990	53 706 729	84.2	361 768 524
Ukraine	1990	1990	1990	937 954 204	76.0	5 702 761 558
United Kingdom	1990	1995	1995	803 191 325	80.0	2 744 937 332
<b>Total<sup>h</sup></b>				<b>7 875 497 155</b>		<b>51 488 867 242</b>

*Note:* The information in this table is based on the final values available in the initial review reports published as at 31 August 2018, unless stated otherwise (see table footnotes).

<sup>a</sup> Parties included in Annex I may choose to use 1995 as the base year for total emissions of HFCs, PFCs, SF<sub>6</sub> and 1995 or 2000 as the base year for emissions of NF<sub>3</sub> in accordance with Article 3, paragraphs 8 and 8 bis, in the Doha Amendment.

<sup>b</sup> Refers to the total base-year greenhouse gas emissions used for the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment. Note that the following Parties included net emissions from land use, land-use change and forestry (deforestation) in their total greenhouse gas emissions for the base year in accordance with Article 3, paragraph 7 bis, in the Doha Amendment and decision 13/CMP.1, annex, paragraph 5(b): Australia: 148,163,361 t CO<sub>2</sub> eq; Denmark: 8,807 t CO<sub>2</sub> eq; European Union: 5,560,495 t CO<sub>2</sub> eq; Ireland: 8,230 t CO<sub>2</sub> eq; Luxembourg: 268,381 t CO<sub>2</sub> eq; Netherlands: 752,270 t CO<sub>2</sub> eq; Portugal: 4,276,759 t CO<sub>2</sub> eq; and United Kingdom of Great Britain and Northern Ireland: 246,048 t CO<sub>2</sub> eq.

<sup>c</sup> The emission reduction/limitation target is taken from the third column of the table contained in Annex B in the Doha Amendment to the Kyoto Protocol as contained in annex I to decision 1/CMP.8. For the second commitment period, the European Union and its 28 member States and Iceland agreed to meet their targets jointly in accordance with Article 4 of the Kyoto Protocol.

<sup>d</sup> Belarus had not yet submitted its initial report for the second commitment period as at 31 August 2018.

<sup>e</sup> The base year for CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O is 1990 for Iceland and all member States, except Bulgaria (1988), Hungary (average of 1985–1987), Poland (1988), Romania (1989) and Slovenia (1986).

<sup>f</sup> The assigned amount of the European Union (15,813,089,338 t CO<sub>2</sub> eq) is the difference between (1) the joint assigned amount of the European Union, its member States and Iceland, equalling 80 per cent of their base-year emissions as inscribed in the third column of the table in Annex B in the Doha Amendment to the Kyoto Protocol (annex I to decision 1/CMP.8), multiplied by eight (37,604,433,280 t CO<sub>2</sub> eq), and (2) the sum of the individual assigned amounts of the 28 member States and Iceland (21,791,343,942 tCO<sub>2</sub> eq) determined in line with the terms of the joint fulfilment agreement.

<sup>g</sup> As at 31 August 2018, the review of the initial report of Kazakhstan was in progress; as such, the information in this table is based on the information contained in the initial report for the second commitment period as reported by the Party.

<sup>h</sup> For the base-year emissions, the total includes the base-year emissions of the European Union but does not include the base-year emissions of the individual member States and Iceland, in order to avoid double counting. However, for the assigned amounts, the total includes the assigned amount of the European Union, its individual member States and Iceland as the assigned amount of the European Union is the difference between the joint assigned amount and the sum of the individual assigned amounts of the member States and Iceland.

## 2. Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment

17. Pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment, the assigned amount for the second commitment period of the Kyoto Protocol for each Party included in Annex I is calculated as the percentage inscribed for it in the third column of the table contained in Annex B in the Doha Amendment of its aggregate anthropogenic CO<sub>2</sub> eq emissions of the GHGs from sources listed in Annex A to the Kyoto Protocol in the base year, multiplied by eight. The assigned amounts for the 28 European Union member States

and Iceland have been calculated under the joint fulfilment agreement of the European Union for meeting commitments under the Kyoto Protocol.

18. For the second commitment period, the total assigned amount of 37<sup>12</sup> Annex B Parties taken together is 51,488,867,242 t CO<sub>2</sub> eq.

## B. Greenhouse gas emissions and removals in 2015 and 2016

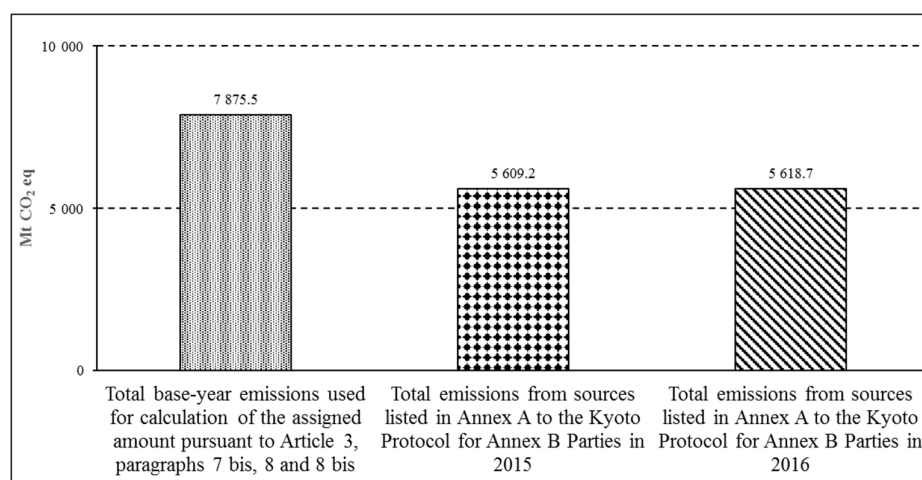
19. The aggregated totals for Annex B Parties presented in this section include the emissions of the European Union but exclude the emissions of its individual member States and Iceland, in order to avoid double counting. The totals in this section could not include Belarus as it had not yet submitted its initial report for the second commitment period of the Kyoto Protocol as at 31 August 2018.

20. The information on GHG emissions provided here includes indirect carbon dioxide emissions, where reported.

### 1. Emissions from sources listed in Annex A to the Kyoto Protocol in 2015 and 2016

21. On the basis of the information submitted by Annex B Parties, the total GHG emissions of Annex B Parties from sources listed in Annex A to the Kyoto Protocol in 2016 amounted to 5,618.7 Mt CO<sub>2</sub> eq. This is 28.7 per cent lower than the base-year level defined under the Kyoto Protocol and 0.17 per cent higher than the 2015 level (see the figure below).

**Total greenhouse gas emissions for Annex B Parties from sources listed in Annex A to the Kyoto Protocol in 2015 and 2016**



*Notes:* (1) The values for the total greenhouse gas emissions from sources listed in Annex A to the Kyoto Protocol for Annex B Parties in 2015 and 2016, which are based on information submitted in 2018, are presented here provisionally and may change depending on the outcomes of the ongoing annual reviews; (2) the totals include the emissions of the European Union but not of its individual member States and Iceland; (3) the totals could not include the emissions of Belarus as it had not yet submitted its initial report for the second commitment period of the Kyoto Protocol as at 31 August 2018.

### 2. Difference in the data for 2015 on emissions from Annex A sources between the 2017 and 2018 submissions

22. Two sets of data on GHG emissions from sources listed in Annex A to the Kyoto Protocol are considered in this report: the values reported in the 2017 submissions, which

<sup>12</sup> The total includes the assigned amount of the European Union, its individual member States and Iceland. The total does not include the assigned amount of Belarus, which had not yet submitted its initial report for the second commitment period of the Kyoto Protocol as at 31 August 2018.

have been reviewed, where applicable, and the latest available values, reported in the 2018 submissions, the review of which is in progress.

23. Total GHG emissions from sources listed in Annex A to the Kyoto Protocol in 2015 reported by Parties in their 2018 submissions amounted to 5,609.2 Mt CO<sub>2</sub> eq. That is 0.6 per cent higher than reported by Annex B Parties for the same year in their 2017 submissions (5,574.5 Mt CO<sub>2</sub> eq). The change in value is due primarily to the recalculations that Parties applied to their GHG inventories.

### 3. Greenhouse gas emissions and removals from land use, land-use change and forestry activities

24. Of the Parties that had submitted an initial report as at 31 August 2018, 33 chose to account for LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol for the entire second commitment period at the end of the commitment period and 3 Parties chose to account for them annually. Similarly, 34 Parties chose to account for LULUCF activities under Article 3, paragraph 4, of the Kyoto Protocol for the entire second commitment period at the end of the commitment period and 2 Parties chose to account for them annually. In accordance with decision 2/CMP.7, all Parties included in Annex I shall account for anthropogenic GHG emissions by sources and removals by sinks resulting from any activity under Article 3, paragraph 4, of the Kyoto Protocol elected in the first commitment period and forest management. Twenty-four Parties elected not to account for any of the LULUCF activities other than forest management under Article 3, paragraph 4, of the Kyoto Protocol, while the other Parties chose to account for at least one of them (see table 4). The Party counts in this paragraph exclude the European Union, for which the periodicity of reporting is determined by its individual member States and Iceland.

Table 4

#### Summary of methods chosen by Parties in accounting for activities under Article 3, paragraph 4, of the Kyoto Protocol

<i>Activity under Article 3, paragraph 4, of the Kyoto Protocol</i>	<i>Number of Parties by type of accounting period elected</i>		
	<i>No accounting</i>	<i>Annually</i>	<i>Entire commitment period</i>
Forest management	0	2	34
Cropland management	27	1	8
Grazing land management	27	1	8
Revegetation	33	0	3
Wetland drainage and rewetting	35	0	1

*Note:* The Party counts do not include the European Union.

25. In accordance with decision 15/CMP.1 in conjunction with decisions 3/CMP.11 and 2/CMP.8, Annex B Parties are required to include in their annual GHG inventories information on anthropogenic GHG emissions by sources and removals by sinks from LULUCF activities under Article 3, paragraph 3, forest management under Article 3, paragraph 4, and, if any, elected activities under Article 3, paragraph 4, of the Kyoto Protocol. As at 31 August 2018, 37 Annex B Parties<sup>13</sup> had reported information on GHG emissions and removals from LULUCF activities under Article 3, paragraph 3, forest management under Article 3, paragraph 4, and, if any, elected activities under Article 3, paragraph 4, of the Kyoto Protocol in their 2018 annual submission. A summary of the information provided pursuant to decisions 2/CMP.7, 6/CMP.9 and 3/CMP.11 on the total net anthropogenic GHG emissions and removals for Annex B Parties from each of the LULUCF activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol for 2015 and 2016 is provided in table 5.

<sup>13</sup> Belarus had not yet submitted such information as at 31 August 2018.

Table 5

**Summary of total net anthropogenic greenhouse gas emissions and removals for Annex B Parties from land use, land-use change and forestry activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol for 2015 and 2016 (provisional values)**

<i>Land use, land-use change and forestry activity under Article 3, paragraphs 3 and 4, of the Kyoto Protocol</i>	<i>Number of reporting Parties</i>	<i>Net greenhouse gas emissions or removals (t CO<sub>2</sub> eq) in 2015</i>	<i>Net greenhouse gas emissions or removals (t CO<sub>2</sub> eq) in 2016</i>
Article 3, paragraph 3, activities			
Afforestation and reforestation	33	–86 398 140	–84 726 915
Deforestation	34	69 895 227	77 730 884
Net emissions or removals	34	–16 502 913	–6 996 031
Article 3, paragraph 4, activities			
Forest management	34	–539 246 652	–534 173 216
Cropland management	9	26 002 759	25 430 532
Grazing land management	9	23 600 642	21 360 447
Revegetation	3	–1 901 356	–2 007 308
Wetland drainage and rewetting	0		
Net emissions or removals	34	–491 544 606	–489 389 545

*Note:* Greenhouse gas information includes the emissions of the European Union but excludes the emissions of its individual member States and Iceland in order to avoid double counting. Party counts exclude the European Union and include its individual member States and Iceland, if appropriate.

26. As at 31 December 2017, no removal units had been issued into national registries resulting from activities under Article 3, paragraph 3, forest management under Article 3, paragraph 4, and, if any, elected activities under Article 3, paragraph 4, of the Kyoto Protocol accounted in accordance with decisions 13/CMP.1, 2/CMP.7 and 6/CMP.9 for the second commitment period of the Kyoto Protocol.

#### **4. Difference in the data for 2015 on emissions and removals from land use, land-use change and forestry activities between the 2017 and 2018 submissions**

27. There are two sets of data on GHG emissions from LULUCF activities under Article 3, paragraph 3, forest management under Article 3, paragraph 4, and, if any, elected activities under Article 3, paragraph 4, of the Kyoto Protocol for 2015: the values reported in the 2017 submissions,<sup>14</sup> which have been reviewed, where applicable, and the values reported in the 2018 submissions,<sup>15</sup> which are the latest available data, the review of which is in progress.

28. The net GHG emissions and removals from the above-mentioned activities in 2015 reported by 36 Parties in their 2017 submissions amounted to –500.3 Mt CO<sub>2</sub> eq. Those net GHG removals are 1.6 per cent higher than reported by the same Annex B Parties<sup>16</sup> for 2015 in their 2018 submissions (–508.0 Mt CO<sub>2</sub> eq). The change in value was caused primarily by the recalculations that Parties applied to their GHG inventories.

<sup>14</sup> In their 2017 annual submissions, Belarus and Monaco did not submit information on GHG emissions and removals from LULUCF activities under Article 3, paragraph 3, forest management under Article 3, paragraph 4, and, if any, elected activities under Article 3, paragraph 4, of the Kyoto Protocol.

<sup>15</sup> In its 2018 annual submission, Belarus did not submit information on GHG emissions and removals from LULUCF activities under Article 3, paragraph 3, forest management under Article 3, paragraph 4, and, if any, elected activities under Article 3, paragraph 4, of the Kyoto Protocol.

<sup>16</sup> This comparison could not include Belarus and Monaco as their reports did not provide information on GHG emissions and removals from LULUCF activities under Article 3, paragraph 3, forest management under Article 3, paragraph 4, and, if any, elected activities under Article 3, paragraph 4, of the Kyoto Protocol in their 2017 annual submissions.

## C. Transactions and holdings of Kyoto Protocol units

29. This section provides a provisional overview<sup>17</sup> of additions to and subtractions from the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment at the end of 2017 for the 34 Annex B Parties that reported their SEF tables with information on Kyoto Protocol units in 2018.

30. In this section, aggregated quantities of Kyoto Protocol units and counts of Parties include the individual member States of the European Union and Iceland but exclude the European Union in order to avoid double counting.

### 1. Transactions of Kyoto Protocol units

31. Decision 3/CMP.11 classifies transactions of Kyoto Protocol units into two categories: internal and external. An internal transaction does not involve another national registry, whereas an external transaction involves the transaction of Kyoto Protocol units from one national registry to another.

32. Between 1 January and 31 December 2017, 12 Parties executed at least one form of internal transaction. All transactions were related to the cancellation of Kyoto Protocol units, which were reported under the voluntary cancellation account. Twelve Parties, of which nine are European Union member States, transferred a total quantity of 3.8 million CERs into the voluntary cancellation account. Similarly, three European Union member States transferred a total quantity of 0.04 million ERUs into the “voluntary cancellation” account.

33. Table 6 provides a summary of information on the total quantities of Kyoto Protocol units and the number of Parties involved in external transactions that occurred between 1 January and 31 December 2017.

Table 6

**Total Kyoto Protocol units acquired or transferred through external transactions between 1 January and 31 December 2017<sup>a</sup>**

Transaction type		Kyoto Protocol units by external transaction type (Mt CO <sub>2</sub> eq)					
		AAUs	ERUs	RMUs	CERs <sup>b</sup>	tCERs	ICERs
Addition	Quantities acquired or forwarded <sup>b</sup>	0	5.38	0	62.56	0	0
	Number of Parties involved	0	3	0	18	0	0
Subtraction	Quantities transferred	0	5.38	0	45.86	0	0
	Number of Parties involved	0	2	0	18	0	0

*Abbreviations:* AAU = assigned amount unit, CER = certified emission reduction, ERU = emission reduction unit, ICER = long-term certified emission reduction, RMU = removal unit, tCER = temporary certified emission reduction.

<sup>a</sup> The transaction quantities and Party counts shown in this table exclude the European Union but include its individual member States and Iceland in order to avoid double counting.

<sup>b</sup> CERs are forwarded by the clean development mechanism registry.

### 2. Holdings of Kyoto Protocol units by holding account type as at 31 December 2017

34. For the Annex B Parties that reported information on Kyoto Protocol units pursuant to decisions 13/CMP.1 and 15/CMP.1, there were 271.53 million Kyoto Protocol units in national registries of Parties included in Annex I by the end of 2017, which comprised 5.79 million AAUs (in the previous period surplus reserve account of one Party), 78.01 million ERUs (66.12 million in the Party holding account of 8 Parties, 11.86 million in the entity holding account of 15 Parties and 0.04 million in the voluntary cancellation account of 3 Parties) and 187.72 million CERs (125.62 million in the Party holding account of 16 Parties, 55.50 million in the entity holding account of 20 Parties and 6.60 million in the voluntary cancellation account of 15 Parties).

<sup>17</sup> At the time of the preparation of this report, the annual review of the information reported by Annex B Parties in 2018 was still in progress.

35. A summary of the total quantities of the different Kyoto Protocol units by account type as at 31 December 2017 for Annex B Parties<sup>18</sup> is provided in table 7. Table 8 shows the breakdown of total Kyoto Protocol units by Party.

36. Detailed information on the status of accounts for each Annex B Party can be found in document FCCC/KP/CMP/2018/5/Add.1.

Table 7

**Summary of total quantities<sup>a</sup> of Kyoto Protocol units by account type for Annex B Parties as at 31 December 2017**

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

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	0	66.12	0	125.62	0	0
Entity holding accounts	0	11.86	0	55.50	0	0
Retirement account	0	0	0	0	0	0
Previous period surplus reserve account	5.79					
Article 3.3/3.4 net source cancellation account	0	0	0	0		
Non-compliance cancellation account	0	0	0	0		
Voluntary cancellation account	0	0.04	0	6.60	0	0
Cancellation account for remaining units after carry-over	0	0	0	0	0	0
Article 3.1 ter and quarter ambition increase cancellation account	0					
Article 3.7 ter cancellation account	0					
tCER cancellation account for expiry					0	
ICER cancellation account for expiry						0
ICER cancellation account for reversal of storage						0
ICER cancellation account for non-submission of certification report						0
tCER replacement account for expiry	0	0	0	0	0	
ICER replacement account for expiry	0	0	0	0		
ICER replacement account for reversal of storage	0	0	0	0		0
ICER replacement account for non-submission of certification report	0	0	0	0		0
<b>Total</b>	<b>5.79</b>	<b>78.01</b>	<b>0</b>	<b>187.72</b>	<b>0</b>	<b>0</b>

*Abbreviations:* AAU = assigned amount unit, CER = certified emission reduction, ERU = emission reduction unit, ICER = long-term certified emission reduction, RMU = removal unit, tCER = temporary certified emission reduction.

<sup>a</sup> "Total quantities" refers to the sum of the Kyoto Protocol units in each account type for Annex B Parties, excluding the European Union but including its individual member States and Iceland.

<sup>18</sup> As at 31 August 2018, Belarus and Kazakhstan had not yet submitted SEF tables for the second commitment period of the Kyoto Protocol for the period from 1 January to 31 December 2017.

Table 8  
**Total quantities<sup>a</sup> of Kyoto Protocol units for Annex B Parties as at 31 December 2017**

<i>Annex B Party</i>	<i>Total quantity by unit type (Mt CO<sub>2</sub> eq)</i>					
	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Australia	0	0	0	13.41	0	0
Austria	0	0	0	2.50	0	0
Belarus <sup>b</sup>	—	—	—	—	—	—
Belgium	0	3.27	0	17.16	0	0
Bulgaria	0	0.62	0	0.05	0	0
Croatia	0	0	0	0	0	0
Cyprus	0	0	0	0	0	0
Czechia	0	0	0	0	0	0
Denmark	0	0	0	0.29	0	0
Estonia	0	0	0	0	0	0
European Union	0	0	0	89.47	0	0
Finland	0	2.92	0	8.77	0	0
France	0	0	0	0.16	0	0
Germany	0	0.03	0	3.24	0	0
Greece	0	0	0	0	0	0
Hungary	0	3.88	0	5.34	0	0
Iceland	0	0	0	0	0	0
Ireland	0	0.07	0	5.26	0	0
Italy	0	1.11	0	4.10	0	0
Kazakhstan <sup>b</sup>	—	—	—	—	—	—
Latvia	0	0.01	0	0.02	0	0
Liechtenstein	0	0	0	0.21	0	0
Lithuania	0	2.33	0	0.25	0	0
Luxembourg	0	0	0	1.47	0	0
Malta	0	0	0	0	0	0
Monaco	0	0	0	0	0	0
Netherlands	0	5.35	0	3.55	0	0
Norway	0	0.82	0	16.72	0	0
Poland	0	37.57	0	42.97	0	0
Portugal	0	0	0	0	0	0
Romania	0	17.87	0	8.69	0	0
Slovakia	0	0	0	0	0	0
Slovenia	0	0	0	0	0	0
Spain	0	2.17	0	17.03	0	0
Sweden	0	0	0	11.34	0	0
Switzerland	5.79	0	0	21.66	0	0
Ukraine	0	0	0	0	0	0
United Kingdom	0	0.00	0	3.54	0	0

*Abbreviations:* AAU = assigned amount unit, CER = certified emission reduction, ERU = emission reduction unit, ICER = long-term certified emission reduction, RMU = removal unit, tCER = temporary certified emission reduction.

<sup>a</sup> “Total quantities” refers to the sum of the Kyoto Protocol units in each account type for each Annex B Party.

<sup>b</sup> Party had not submitted the standard electronic format tables for 2017 as at 31 August 2018.



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of the Parties to the Kyoto Protocol**

**Fourteenth session**

**Katowice, 2–14 December 2018**

Item X of the provisional agenda

**Annual compilation and accounting report for Annex B  
Parties under the Kyoto Protocol for 2018**

**Note by the secretariat**

**Addendum**

**Compilation and accounting information by Party**

*Summary*

This document contains detailed information on the initial accounting parameters for the second commitment period under the Kyoto Protocol for Parties included in Annex I with commitments inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol as contained in annex I to decision 1/CMP.8. It also contains annual information on anthropogenic greenhouse gas (GHG) emissions in 2015 and 2016 from sources listed in Annex A to the Kyoto Protocol; GHG emissions and removals in 2015 and 2016 from land use, land-use change and forestry activities under Article 3, paragraph 3, forest management under Article 3, paragraph 4, and any other elected activities under Article 3, paragraph 4, of the Kyoto Protocol; and holdings and transactions of Kyoto Protocol units. This document contains both final values (from the reviews of the 2017 annual submissions and of the reports to facilitate the calculation of the assigned amount for the second commitment period) and provisional values (from the 2018 annual submissions and the reports to facilitate the calculation of the assigned amount for the second commitment period, both as reported by Parties). The final values will be made available upon completion of the associated reviews and the resolution of any questions of implementation.

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## I. Introduction

1. Document FCCC/KP/CMP/2018/5 provides an overview of the information available as at 31 August 2018 on annual accounting parameters for the second commitment period under the Kyoto Protocol for Parties included in Annex I<sup>1</sup> with commitments inscribed in the third column of the table in Annex B in the Doha Amendment to the Kyoto Protocol (Annex B Parties) as contained in annex I to decision 1/CMP.8 (hereinafter rather to as the Doha Amendment); transactions and holdings of Kyoto Protocol units reported in 2018; and greenhouse gas (GHG) emissions for 2015 and 2016.

2. This document includes the following, more detailed, information, available as at 31 August 2018,<sup>2</sup> for individual Annex B Parties:

(a) Key initial accounting parameters for the second commitment period under the Kyoto Protocol;

(b) Total GHG emissions from the sources listed in Annex A to the Kyoto Protocol reported for 2015 and 2016, including indirect carbon dioxide emissions where reported;

(c) GHG emissions and removals in the base year, 2015 and 2016 from land use, land-use change and forestry activities under Article 3, paragraph 3, forest management under Article 3, paragraph 4, and any other elected activities under Article 3, paragraph 4, of the Kyoto Protocol;

(d) Transactions and holdings of Kyoto Protocol units as at 31 December 2016 and 2017.

3. The annual information submitted in 2018 and in the reports to facilitate the calculation of the assigned amount for the second commitment period will be recorded in the compilation and accounting database after the completion of the associated review processes and the resolution of any questions of implementation.

4. This document also contains relevant information reported in accordance with decision 2/CMP.8, paragraph 4, and decision 3/CMP.11, paragraph 14, and other information reported on a voluntary basis by Parties included in Annex I that do not have commitments inscribed in the third column of Annex B in the Doha Amendment (Japan, New Zealand and Russian Federation).

5. The information referred to in paragraphs 2 and 4 above is based on initial reports, initial review reports and annual submissions of GHG inventories and accounting information submitted by Parties and available on the UNFCCC website.<sup>3</sup>

## II. Australia

6. Australia met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 11 July 2009.

7. Tables 1–5 provide detailed information on Australia’s initial accounting parameters for the second commitment period under the Kyoto Protocol, its GHG emissions and

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<sup>1</sup> The term “Party included in Annex I” is defined in Article 1, paragraph 7, of the Kyoto Protocol.

<sup>2</sup> The accounting parameters presented in this document are based on the final values available in the initial review reports published as at 31 August 2018; where initial review reports had not been published, the accounting parameters are based, where available, on the values contained in the reports to facilitate the calculation of the assigned amount for the second commitment period as reported by Parties. Similarly, where the review of annual information submitted by Parties has been conducted, the associated values are presented as final; where it is still pending, the values are provisional.

<sup>3</sup> <https://unfccc.int/process/transparency-and-reporting/reporting-and-review-under-the-kyoto-protocol/second-commitment-period/initial-reports> and <https://unfccc.int/process-and-meetings/transparency-and-reporting/reporting-and-review-under-the-convention/greenhouse-gas-inventories-annex-i-parties/national-inventory-submissions-2018>.

removals, the holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 1

**Key initial accounting parameters under the Kyoto Protocol for Australia (final values)**

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	566 786 410	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	99.5	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, of the Doha Amendment for the second commitment period	4 511 619 826	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight	-237 336 202	t CO <sub>2</sub> eq
Limitation on the additions to Australia's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	117 214 453	t CO <sub>2</sub> eq

<sup>a</sup> The total greenhouse gas emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment, including emissions from the conversion of forests (deforestation) of 148,163,361 t CO<sub>2</sub> eq.

Table 2

**Australia's emissions/removals of greenhouse gases in 2015 and 2016**

<i>Parameter</i>	<i>Emissions/removals of greenhouse gases (t CO<sub>2</sub> eq)</i>				
	<i>Final values (2017 submission)</i>		<i>Provisional values (2018 submission)</i>		
	<i>Base year</i>	<i>2015</i>	<i>Base year</i>	<i>2015</i>	<i>2016</i>
Emissions of greenhouse gases from sources listed in Annex A to the Kyoto Protocol		533 282 713		537 550 854	549 157 716
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol (afforestation and reforestation, and deforestation)		18 523 846		6 345 015	9 195 687
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		-18 393 558		-17 944 944	-27 581 970
FMRL (t CO <sub>2</sub> eq per year)		4 700 000		4 700 000	4 700 000
Technical correction to FMRL (t CO <sub>2</sub> eq per year)		-4 335 723		-4 070 332	-4 070 332
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	7 144 668	4 437 518	6 358 249	4 352 253	2 199 719

*Abbreviations:* FMRL = forest management reference level, LULUCF = land use, land-use change and forestry.

Table 3

**Australia's total quantities of Kyoto Protocol units by account type at the end of 2016 (final values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>iCERs</i>
Party holding accounts	NO	NO	NO	8 035 002	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	304 692	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>8 339 694</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 4

**Australia's total quantities of Kyoto Protocol units by account type at the end of 2017 (provisional values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	NO	NO	11 925 019	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	1 484 884	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>13 409 903</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 5

**Australia's total transactions of Kyoto Protocol units in 2017 (provisional values)**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	6 492 374	NO	NO
Total transactions	NO	NO	NO	6 492 374	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	1 180 192	NO	NO
External transactions	NO	NO	NO	1 422 165	NO	NO
Total transactions	NO	NO	NO	2 602 357	NO	NO

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

### III. Austria

8. Austria met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 5 April 2008.

9. Tables 6–10 provide detailed information on Austria's initial accounting parameters for the second commitment period under the Kyoto Protocol, its GHG emissions and removals, the holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 6

**Key initial accounting parameters under the Kyoto Protocol for Austria (final values)**

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	78 855 136	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period <sup>b</sup>	405 712 317	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	
Limitation on the additions to Austria's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	22 079 438	t CO <sub>2</sub> eq

*Abbreviation:* NA = not applicable.

<sup>a</sup> The total greenhouse gas emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment.

<sup>b</sup> The assigned amounts of each European Union member State and Iceland are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, paragraph 7 bis, in the Doha Amendment for that member State or Iceland.

<sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the European Union, its member States and Iceland.

Table 7

**Austria's emissions/removals of greenhouse gases in 2015 and 2016**

Parameter	Emissions/removals of greenhouse gases (t CO <sub>2</sub> eq)				
	Final values (2017 submission)		Provisional values (2018 submission)		
	Base year	2015	Base year	2015	2016
Emissions of greenhouse gases from sources listed in Annex A to the Kyoto Protocol		78 850 807		78 855 710	79 672 644
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol (afforestation and reforestation, and deforestation)		-1 553 118		-1 546 982	-1 585 089
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		-3 851 106		-3 517 846	-3 270 259
FMRL (t CO <sub>2</sub> eq per year)		-6 516 000		-6 516 000	-6 516 000
Technical correction to FMRL (t CO <sub>2</sub> eq per year)		5 823 000		5 823 000	5 823 000
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA	NA	NA	NA

*Abbreviations:* FMRL = forest management reference level, LULUCF = land use, land-use change and forestry, NA = not applicable.

Table 8

**Austria's total quantities of Kyoto Protocol units by account type at the end of 2016 (final values)**

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
Party holding accounts	NO	NO	NO	5 241	NO	NO
Entity holding accounts	NO	NO	NO	440 053	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	119 464	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>564 758</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 9

**Austria's total quantities of Kyoto Protocol units by account type at the end of 2017 (provisional values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	NO	NO	2 272 701	NO	NO
Entity holding accounts	NO	NO	NO	109 531	NO	NO
Retirement account	NO	NO	NO		NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	119 464	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>2 501 696</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 10

**Austria's total transactions of Kyoto Protocol units in 2017 (provisional values)**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						



<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Internal transactions		NO	NO			
External transactions	NO	NO	NO	418 310	NO	NO
Total transactions	NO	NO	NO	418 310	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	748 832	NO	NO
Total transactions	NO	NO	NO	748 832	NO	NO

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

## IV. Belarus

10. The eligibility of Belarus to participate in the flexibility mechanisms under the Kyoto Protocol had not been established<sup>4</sup> as at 31 August 2018.

11. As at 31 August 2018 Belarus had not yet submitted its report to facilitate the calculation of the assigned amount for the second commitment period of the Kyoto Protocol or annual information on its GHG emissions and removals in 2015 and 2016 from land use, land-use change and forestry activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol.

12. Table 11 provides information on Belarus's annual GHG emissions from Annex A sources.

Table 11

### Belarus's emissions/removals of greenhouse gases in 2015 and 2016<sup>a</sup>

<i>Parameter</i>	<i>Emissions/removals of greenhouse gases (t CO<sub>2</sub> eq)</i>				
	<i>Final values (2017 submission)</i>		<i>Provisional values (2018 submission)</i>		
	<i>Base year</i>	<i>2015</i>	<i>Base year</i>	<i>2015</i>	<i>2016</i>
Emissions of greenhouse gases from sources listed in Annex A to the Kyoto Protocol		89 607 643		90 170 934	91 541 587

<sup>a</sup> As at 31 August 2018 Belarus had not yet submitted annual information on its greenhouse gas emissions and removals in 2015 and 2016 from land use, land-use change and forestry activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol.

13. Also as at 31 August 2018 Belarus had not yet submitted standard electronic format tables for the second commitment period of the Kyoto Protocol.

## V. Belgium

14. Belgium met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 22 April 2008.

15. Tables 12–16 provide detailed information on Belgium's initial accounting parameters for the second commitment period under the Kyoto Protocol, its GHG emissions and removals, the holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

<sup>4</sup> See decision 11/CMP.1, annex, paragraphs 2 and 3, in conjunction with decision 1/CMP.8; decision 9/CMP.1, annex, paragraphs 21 and 22; and decision 3/CMP.1, annex, paragraphs 31 and 32.

Table 12

**Key initial accounting parameters under the Kyoto Protocol for Belgium (final values)**

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	147 811 094	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period <sup>b</sup>	584 228 513	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	
Limitation on the additions to Belgium's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	41 387 106	t CO <sub>2</sub> eq

*Abbreviation:* NA = not applicable.

<sup>a</sup> The total greenhouse gas emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment.

<sup>b</sup> The assigned amounts of each European Union member State and Iceland are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, paragraph 7 bis, in the Doha Amendment for that member State or Iceland.

<sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the European Union, its member States and Iceland.

Table 13

**Belgium's emissions/removals of greenhouse gases in 2015 and 2016**

<i>Parameter</i>	<i>Emissions/removals of greenhouse gases (t CO<sub>2</sub> eq)</i>				
	<i>Final values (2017 submission)</i>		<i>Provisional values (2018 submission)</i>		
	<i>Base year</i>	<i>2015</i>	<i>Base year</i>	<i>2015</i>	<i>2016</i>
Emissions of greenhouse gases from sources listed in Annex A to the Kyoto Protocol		117 443 259		117 584 429	117 727 113
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol (afforestation and reforestation, and deforestation)		929 027		753 873	740 720
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		–3 371 977		–2 464 300	–2 456 663
FMRL (t CO <sub>2</sub> eq per year)		–2 499 000		–2 499 000	–2 499 000
Technical correction to FMRL (t CO <sub>2</sub> eq per year)		NA		NA	NA
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol			NA	NA	NA

*Abbreviations:* FMRL = forest management reference level, LULUCF = land use, land-use change and forestry, NA = not applicable.

Table 14

**Belgium's total quantities of Kyoto Protocol units by account type at the end of 2016 (final values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>iCERs</i>
Party holding accounts	NO	NO	NO	NO	NO	NO

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Entity holding accounts	NO	3 267 881	NO	17 037 025	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	40 250	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>3 267 881</b>	<b>NO</b>	<b>17 077 275</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 15

**Belgium's total quantities of Kyoto Protocol units by account type at the end of 2017 (provisional values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	3 267 881	NO	17 119 908	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	40 250	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>3 267 881</b>	<b>NO</b>	<b>17 160 158</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 16

**Belgium's total transactions of Kyoto Protocol units in 2017 (provisional values)**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	300 048	NO	NO
Total transactions	NO	NO	NO	300 048	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	217 165	NO	NO
Total transactions	NO	NO	NO	217 165	NO	NO

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

## VI. Bulgaria

16. Bulgaria met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 25 November 2008.

17. Tables 17–21 provide detailed information on Bulgaria's initial accounting parameters for the second commitment period under the Kyoto Protocol, its GHG emissions and removals, the holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 17

**Key initial accounting parameters under the Kyoto Protocol for Bulgaria (final values)**

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	114 105 323	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period <sup>b</sup>	222 945 983	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	
Limitation on the additions to Bulgaria's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	31 949 490	t CO <sub>2</sub> eq

Abbreviation: NA = not applicable.

<sup>a</sup> The total greenhouse gas emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment.

<sup>b</sup> The assigned amounts of each European Union member State and Iceland are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, paragraph 7 bis, in the Doha Amendment for that member State or Iceland.

<sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the European Union, its member States and Iceland.

Table 18

**Bulgaria's emissions/removals of greenhouse gases in 2015 and 2016**

Parameter	Emissions/removals of greenhouse gases (t CO <sub>2</sub> eq)				
	Final values (2017 submission)		Provisional values (2018 submission)		
	Base year	2015	Base year	2015	2016
Emissions of greenhouse gases from sources listed in Annex A to the Kyoto Protocol		61 482 753		61 747 956	59 059 734
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol (afforestation and reforestation, and deforestation)		-1 223 775		-1 219 711	-1 432 326
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		-5 836 848		-5 836 848	-5 797 344
FMRL (t CO <sub>2</sub> eq per year)		-8 168 000		-7 950 000	-7 950 000
Technical correction to FMRL (t CO <sub>2</sub> eq per year)		23 000		23 000	23 000
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol		NA	NA	NA	NA

Abbreviations: FMRL = forest management reference level, LULUCF = land use, land-use change and forestry, NA = not applicable.

Table 19

**Bulgaria's total quantities of Kyoto Protocol units by account type at the end of 2016 (final values)**

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 20

**Bulgaria's total quantities of Kyoto Protocol units by account type at the end of 2017 (provisional values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	620 328	NO	48 593	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>620 328</b>	<b>NO</b>	<b>48 593</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 21

**Bulgaria's total transactions of Kyoto Protocol units in 2017 (provisional values)**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

## VII. Croatia

18. Croatia met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 27 December 2009.

19. Tables 22–26 provide detailed information on Croatia's initial accounting parameters for the second commitment period under the Kyoto Protocol, its GHG emissions and removals, the holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 22

**Key initial accounting parameters under the Kyoto Protocol for Croatia (final values)**

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	31 204 631	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period <sup>b</sup>	162 271 086	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	
Limitation on the additions to Croatia's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	8 737 296	t CO <sub>2</sub> eq

*Abbreviation:* NA = not applicable.

<sup>a</sup> The total greenhouse gas emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment.

<sup>b</sup> The assigned amounts of each European Union member State and Iceland are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, paragraph 7 bis, in the Doha Amendment for that member State or Iceland.

<sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the European Union, its member States and Iceland.

Table 23

**Croatia's emissions/removals of greenhouse gases in 2015 and 2016**

<i>Parameter</i>	<i>Emissions/removals of greenhouse gases (t CO<sub>2</sub> eq)</i>				
	<i>Final values (2017 submission)</i>		<i>Provisional values (2018 submission)</i>		
	<i>Base year</i>	<i>2015</i>	<i>Base year</i>	<i>2015</i>	<i>2016</i>
Emissions of greenhouse gases from		23 502 150		24 188 623	24 304 160

Parameter	Emissions/removals of greenhouse gases (t CO <sub>2</sub> eq)				
	Final values (2017 submission)		Provisional values (2018 submission)		
	Base year	2015	Base year	2015	2016
sources listed in Annex A to the Kyoto Protocol					
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol (afforestation and reforestation, and deforestation)		-187 041		3 862	-107 781
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		-5 686 467		-6 366 783	-6 329 265
FMRL (t CO <sub>2</sub> eq per year)		-6 289 000		-6 289 000	-6 289 000
Technical correction to FMRL (t CO <sub>2</sub> eq per year)		904 831		904 831	904 831
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA	NA	NA	NA

Abbreviations: FMRL = forest management reference level, LULUCF = land use, land-use change and forestry, NA = not applicable.

Table 24

**Croatia's total quantities of Kyoto Protocol units by account type at the end of 2016 (final values)**

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>



*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 25

**Croatia's total quantities of Kyoto Protocol units by account type at the end of 2017 (provisional values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 26

**Croatia's total transactions of Kyoto Protocol units in 2017 (provisional values)**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

## VIII. Cyprus

20. The eligibility of Cyprus to participate in the flexibility mechanisms under the Kyoto Protocol had not been established<sup>5</sup> as at 31 August 2018.

21. Tables 27–31 provide detailed information on Cyprus's initial accounting parameters for the second commitment period under the Kyoto Protocol, its GHG emissions and removals, the holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 27

### Key initial accounting parameters under the Kyoto Protocol for Cyprus (final values)

Parameter	Value	Unit
Total base-year emissions <sup>a</sup>	5 627 236	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period <sup>b</sup>	47 450 128	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	
Limitation on the additions to Cyprus's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	1 575 626	t CO <sub>2</sub> eq

Abbreviation: NA = not applicable.

<sup>a</sup> The total greenhouse gas emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment.

<sup>b</sup> The assigned amounts of each European Union member State and Iceland are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, paragraph 7 bis, in the Doha Amendment for that member State or Iceland.

<sup>c</sup> Cyprus did not have a quantified emission limitation or reduction commitment in the first commitment period of the Kyoto Protocol.

Table 28

### Cyprus's emissions/removals of greenhouse gases in 2015 and 2016

Parameter	Emissions/removals of greenhouse gases (t CO <sub>2</sub> eq)				
	Final values (2017 submission)		Provisional values (2018 submission)		
	Base year	2015	Base year	2015	2016
Emissions of greenhouse gases from sources listed in Annex A to the Kyoto Protocol		8 466 671		8 327 586	8 773 059
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol (afforestation and reforestation, and deforestation)		NE, NO		–37 196	–32 453
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		IE, NE, NO		–125 706	–4 770
FMRL (t CO <sub>2</sub> eq per year)				–157 000	–157 000
Technical correction to FMRL (t CO <sub>2</sub> eq per year)		NA		NA	NA
Net emissions or removals from LULUCF activities (excluding forest)	NA, NE, NO	NA, NE, NO	NO	NO	NO

<sup>5</sup> See decision 11/CMP.1, annex, paragraphs 2 and 3, in conjunction with decision 1/CMP.8; decision 9/CMP.1, annex, paragraphs 21 and 22; and decision 3/CMP.1, annex, paragraphs 31 and 32.

Parameter	Emissions/removals of greenhouse gases (t CO <sub>2</sub> eq)				
	Final values (2017 submission)		Provisional values (2018 submission)		
	Base year	2015	Base year	2015	2016

management) under Article 3, paragraph 4, of the Kyoto Protocol

Abbreviations: FMRL = forest management reference level, IE = included elsewhere, LULUCF = land use, land-use change and forestry, NA = not applicable, NE = not estimated, NO = not occurring.

Table 29

**Cyprus's total quantities of Kyoto Protocol units by account type at the end of 2016 (final values)**

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

Abbreviations: AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 30

**Cyprus's total quantities of Kyoto Protocol units by account type at the end of 2017 (provisional values)**

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 31

**Cyprus's total transactions of Kyoto Protocol units in 2017 (provisional values)**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

**IX. Czechia**

22. Czechia met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 24 February 2008.

23. Tables 32–36 provide detailed information on Czechia's initial accounting parameters for the second commitment period under the Kyoto Protocol, its GHG emissions and removals, the holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 32

**Key initial accounting parameters under the Kyoto Protocol for Czechia (final values)**

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	198 316 406	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period <sup>b</sup>	520 515 203	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	
Limitation on the additions to Czechia's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	55 528 593	t CO <sub>2</sub> eq

*Abbreviation:* NA = not applicable.

<sup>a</sup> The total greenhouse gas emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment.

<sup>b</sup> The assigned amounts of each European Union member State and Iceland are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, paragraph 7 bis, in the Doha Amendment for that member State or Iceland.

<sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the European Union, its member States and Iceland.

Table 33

**Czechia's emissions/removals of greenhouse gases in 2015 and 2016**

<i>Parameter</i>	<i>Emissions/removals of greenhouse gases (t CO<sub>2</sub> eq)</i>				
	<i>Final values (2017 submission)</i>		<i>Provisional values (2018 submission)</i>		
	<i>Base year</i>	<i>2015</i>	<i>Base year</i>	<i>2015</i>	<i>2016</i>
Emissions of greenhouse gases from sources listed in Annex A to the Kyoto Protocol		127 925 530		128 419 118	130 348 690
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol (afforestation and reforestation, and deforestation)		–409 640		–413 878	–416 609
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		–5 075 556		–5 918 145	–4 435 687
FMRL (t CO <sub>2</sub> eq per year)		–4 686 000		–4 686 000	–4 686 000
Technical correction to FMRL (t CO <sub>2</sub> eq per year)		NA		NA	NA
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA	NA	NA	NA

*Abbreviations:* FMRL = forest management reference level, LULUCF = land use, land-use change and forestry, NA = not applicable.

Table 34

**Czechia's total quantities of Kyoto Protocol units by account type at the end of 2016 (final values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>iCERs</i>
Party holding accounts	NO	NO	NO	NO	NO	NO

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 35

**Czechia's total quantities of Kyoto Protocol units by account type at the end of 2017 (provisional values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 36

**Czechia's total transactions of Kyoto Protocol units in 2017 (provisional values)**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

**X. Denmark**

24. Denmark met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 20 April 2008.

25. Tables 37–41 provide detailed information on Denmark's initial accounting parameters for the second commitment period under the Kyoto Protocol, its GHG emissions and removals, the holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 37

**Key initial accounting parameters under the Kyoto Protocol for Denmark (final values)**

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	70 801 910	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period <sup>b</sup>	269 377 890	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	
Limitation on the additions to Denmark's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	19 822 068	t CO <sub>2</sub> eq

*Abbreviation:* NA = not applicable.

<sup>a</sup> The total greenhouse gas emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment, including emissions from the conversion of forests (deforestation) of 8,807 t CO<sub>2</sub> eq.

<sup>b</sup> The assigned amounts of each European Union member State and Iceland are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, paragraph 7 bis, in the Doha Amendment for that member State or Iceland.

<sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the European Union, its member States and Iceland.

Table 38

**Denmark's emissions/removals of greenhouse gases in 2015 and 2016**

Parameter	Emissions/removals of greenhouse gases (t CO <sub>2</sub> eq)				
	Final values (2017 submission)		Provisional values (2018 submission)		
	Base year	2015	Base year	2015	2016
Emissions of greenhouse gases from sources listed in Annex A to the Kyoto Protocol		48 331 139		48 501 858	50 478 345
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol (afforestation and reforestation, and deforestation)		-354 863		-354 863	251 254
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		667 734		667 734	677 952
FMRL (t CO <sub>2</sub> eq per year)		409 000		409 000	409 000
Technical correction to FMRL (t CO <sub>2</sub> eq per year)		-82 617		-82 617	-82 617
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	5 348 167	3 825 874	5 234 946	3 895 270	4 429 365

*Abbreviations:* FMRL = forest management reference level, LULUCF = land use, land-use change and forestry.

Table 39

**Denmark's total quantities of Kyoto Protocol units by account type at the end of 2016 (final values)**

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
Party holding accounts	NO	NO	NO	209 438	NO	NO
Entity holding accounts	NO	NO	NO	10 343	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	11 164	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quarter ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO



<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>230 945</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 40

**Denmark's total quantities of Kyoto Protocol units by account type at the end of 2017 (provisional values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	NO	NO	280 409	NO	NO
Entity holding accounts	NO	NO	NO	673	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	11 164	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>292 246</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 41

**Denmark's total transactions of Kyoto Protocol units in 2017 (provisional values)**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	77 456	NO	NO
Total transactions	NO	NO	NO	77 456	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	16 155	NO	NO
Total transactions	NO	NO	NO	16 155	NO	NO

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

## XI. Estonia

26. Estonia met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 15 April 2008.

27. Tables 42–46 provide detailed information on Estonia's initial accounting parameters for the second commitment period under the Kyoto Protocol, its GHG emissions and removals, the holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 42

**Key initial accounting parameters under the Kyoto Protocol for Estonia (final values)**

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	39 996 697	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period <sup>b</sup>	51 056 976	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	
Limitation on the additions to Estonia's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	11 199 075	t CO <sub>2</sub> eq

*Abbreviation:* NA = not applicable.

<sup>a</sup> The total greenhouse gas emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment.

<sup>b</sup> The assigned amounts of each European Union member State and Iceland are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, paragraph 7 bis, in the Doha Amendment for that member State or Iceland.

<sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the European Union, its member States and Iceland.

Table 43

**Estonia's emissions/removals of greenhouse gases in 2015 and 2016**

<i>Parameter</i>	<i>Emissions/removals of greenhouse gases (t CO<sub>2</sub> eq)</i>				
	<i>Final values (2017 submission)</i>		<i>Provisional values (2018 submission)</i>		
	<i>Base year</i>	<i>2015</i>	<i>Base year</i>	<i>2015</i>	<i>2016</i>
Emissions of greenhouse gases from		18 040 485		18 048 938	19 627 042

Parameter	Emissions/removals of greenhouse gases (t CO <sub>2</sub> eq)				
	Final values (2017 submission)		Provisional values (2018 submission)		
	Base year	2015	Base year	2015	2016
sources listed in Annex A to the Kyoto Protocol					
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol (afforestation and reforestation, and deforestation)		6 811		72 196	46 897
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		-3 518 521		-3 906 684	-4 117 226
FMRL (t CO <sub>2</sub> eq per year)		-2 741 000		-2 741 000	-2 741 000
Technical correction to FMRL (t CO <sub>2</sub> eq per year)		NE		NE	NE
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA	NA	NA	NA

Abbreviations: FMRL = forest management reference level, LULUCF = land use, land-use change and forestry, NA = not applicable, NE = not estimated.

Table 44

**Estonia's total quantities of Kyoto Protocol units by account type at the end of 2016 (final values)**

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 45

**Estonia's total quantities of Kyoto Protocol units by account type at the end of 2017 (provisional values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 46

**Estonia's total transactions of Kyoto Protocol units in 2017 (provisional values)**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

## XII. European Union

28. The European Union met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 18 April 2008.

29. Tables 47–51 provide detailed information on the European Union's initial accounting parameters for the second commitment period under the Kyoto Protocol, its GHG emissions and removals, the holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 47

### Key initial accounting parameters under the Kyoto Protocol for the European Union (final values)

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	5 875 692 700	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period <sup>b</sup>	15 813 089 338	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight	–1 063 645 030	t CO <sub>2</sub> eq
Limitation on the additions to the assigned amount of the European Union resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	1 643 637 017	t CO <sub>2</sub> eq

<sup>a</sup> The total greenhouse gas emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment, including emissions from the conversion of forests (deforestation) of 5,560,495 t CO<sub>2</sub> eq.

<sup>b</sup> The assigned amount of the European Union (15,813,089,338 t CO<sub>2</sub> eq) is the difference between (1) the joint assigned amount of the European Union, its member States and Iceland, equalling 80 per cent of its base-year emissions as inscribed in the third column of the table in Annex B in the Doha Amendment to the Kyoto Protocol (annex I to decision 1/CMP.8), multiplied by eight (37,604,433,280 t CO<sub>2</sub> eq) and (2) the sum of the individual assigned amounts of the 28 member States and Iceland (21,791,343,942 tCO<sub>2</sub> eq) determined in line with the terms of the joint fulfilment agreement.

Table 48

### The European Union's emissions/removals of greenhouse gases in 2015 and 2016

<i>Parameter</i>	<i>Emissions/removals of greenhouse gases (t CO<sub>2</sub> eq)</i>				
	<i>Final values (2017 submission)</i>		<i>Provisional values (2018 submission)</i>		
	<i>Base year</i>	<i>2015</i>	<i>Base year</i>	<i>2015</i>	<i>2016</i>
Emissions of greenhouse gases from sources listed in Annex A to the Kyoto Protocol		4 317 434 934		4 326 839 685	4 300 059 071
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol (afforestation and reforestation, and deforestation)		–18 796 396		–20 480 092	–13 619 089
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		–407 414 316		–414 992 597	–402 669 199
FMRL (t CO <sub>2</sub> eq per year)		–315 476 000		–315 476 500	–315 476 500
Technical correction to FMRL (t CO <sub>2</sub> eq per year)		24 765 075		17 234 398	16 020 398
Net emissions or removals from LULUCF activities (excluding forest)	60 123 663	49 412 907	60 313 881	49 865 127	49 005 029

Parameter	Emissions/removals of greenhouse gases (t CO <sub>2</sub> eq)				
	Final values (2017 submission)		Provisional values (2018 submission)		
	Base year	2015	Base year	2015	2016
management) under Article 3, paragraph 4, of the Kyoto Protocol					

Abbreviations: FMRL = forest management reference level, LULUCF = land use, land-use change and forestry.

Table 49

**The European Union's total quantities of Kyoto Protocol units by account type at the end of 2016 (final values)**

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
Party holding accounts	NO	NO	NO	65 538 389	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	1 367 208	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>66 905 597</b>	<b>NO</b>	<b>NO</b>

Abbreviations: AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 50

**The European Union's total quantities of Kyoto Protocol units by account type at the end of 2017 (provisional values)**

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
Party holding accounts	NO	NO	NO	84 671 688	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Voluntary cancellation account	NO	NO	NO	4 800 975	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>89 472 663</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 51

**The European Union's total transactions of Kyoto Protocol units in 2017 (provisional values)**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	37 653 943	NO	NO
Total transactions	NO	NO	NO	37 653 943	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	3 433 767	NO	NO
External transactions	NO	NO	NO	15 086 877	NO	NO
Total transactions	NO	NO	NO	18 520 644	NO	NO

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

### XIII. Finland

30. Finland met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 22 April 2008.

31. Tables 52–56 provide detailed information on Finland's initial accounting parameters for the second commitment period under the Kyoto Protocol, its GHG emissions and removals, the holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 52

**Key initial accounting parameters under the Kyoto Protocol for Finland (final values)**

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	71 350 147	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period <sup>b</sup>	240 544 599	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	
Limitation on the additions to Finland's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	19 978 041	t CO <sub>2</sub> eq

*Abbreviation:* NA = not applicable.

<sup>a</sup> The total greenhouse gas emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment.

<sup>b</sup> The assigned amounts of each European Union member State and Iceland are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, paragraph 7 bis, in the Doha Amendment for that member State or Iceland.

<sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the European Union, its member States and Iceland.

Table 53

**Finland's emissions/removals of greenhouse gases in 2015 and 2016**

<i>Parameter</i>	<i>Emissions/removals of greenhouse gases (t CO<sub>2</sub> eq)</i>				
	<i>Final values (2017 submission)</i>		<i>Provisional values (2018 submission)</i>		
	<i>Base year</i>	<i>2015</i>	<i>Base year</i>	<i>2015</i>	<i>2016</i>
Emissions of greenhouse gases from sources listed in Annex A to the Kyoto Protocol		55 559 213		55 399 821	58 789 594
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol (afforestation and reforestation, and deforestation)		2 923 614		3 565 304	2 959 338
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		–49 312 939		–51 314 834	–47 230 623
FMRL (t CO <sub>2</sub> eq per year)		–20 466 000		–20 466 000	–20 466 000
Technical correction to FMRL (t CO <sub>2</sub> eq per year)		–13 582 000		–14 545 000	–14 545 000
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol		NA		NA	NA

*Abbreviations:* FMRL = forest management reference level, LULUCF = land use, land-use change and forestry, NA = not applicable.

Table 54

**Finland's total quantities of Kyoto Protocol units by account type at the end of 2016 (final values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	NO	NO	1 321 187	NO	NO
Entity holding accounts	NO	NO	NO	67 785	NO	NO



<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	3 487	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>1 392 459</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 55

**Finland's total quantities of Kyoto Protocol units by account type at the end of 2017 (provisional values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	2 912 592	NO	8 502 116	NO	NO
Entity holding accounts	NO	4 625	NO	260 731	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	9 244	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>2 917 217</b>	<b>NO</b>	<b>8 772 091</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 56

**Finland's total transactions of Kyoto Protocol units in 2017 (provisional values)**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	929 353	NO	NO
Total transactions	NO	NO	NO	929 353	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	5 757	NO	NO
External transactions	NO	NO	NO	346 506	NO	NO
Total transactions	NO	NO	NO	352 263	NO	NO

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

**XIV. France**

32. France met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 21 April 2008.

33. Tables 57–61 provide detailed information on France's initial accounting parameters for the second commitment period under the Kyoto Protocol, its GHG emissions and removals, the holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 57

**Key initial accounting parameters under the Kyoto Protocol for France (final values)**

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	548 055 757	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period <sup>b</sup>	3 014 714 832	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	
Limitation on the additions to France's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	153 455 612	t CO <sub>2</sub> eq

*Abbreviation:* NA = not applicable.

<sup>a</sup> The total greenhouse gas emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment.

<sup>b</sup> The assigned amounts of each European Union member State and Iceland are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, paragraph 7 bis, in the Doha Amendment for that member State or Iceland.

<sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the European Union, its member States and Iceland.

Table 58

**France's emissions/removals of greenhouse gases in 2015 and 2016**

Parameter	Emissions/removals of greenhouse gases (t CO <sub>2</sub> eq)				
	Final values (2017 submission)		Provisional values (2018 submission)		
	Base year	2015	Base year	2015	2016
Emissions of greenhouse gases from sources listed in Annex A to the Kyoto Protocol		458 317 316		458 059 989	458 165 243
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol (afforestation and reforestation, and deforestation)		1 341 547		1 187 191	911 956
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		-48 864 799		-54 975 165	-50 200 240
FMRL (t CO <sub>2</sub> eq per year)		-67 410 000		-67 410 000	-67 410 000
Technical correction to FMRL (t CO <sub>2</sub> eq per year)		21 795 000		21 795 000	21 795 000
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NO	NE, NO	NO	NE, NO	NE, NO

*Abbreviations:* FMRL = forest management reference level, LULUCF = land use, land-use change and forestry, NE = not estimated, NO = not occurring.

Table 59

**France's total quantities of Kyoto Protocol units by account type at the end of 2016 (final values)**

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	4 638	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	30 621	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>35 259</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 60

**France's total quantities of Kyoto Protocol units by account type at the end of 2017 (provisional values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	131 855	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	31 468	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>163 323</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 61

**France's total transactions of Kyoto Protocol units in 2017 (provisional values)**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Internal transactions		NO	NO			
External transactions	NO	NO	NO	128 064	NO	NO
Total transactions	NO	NO	NO	128 064	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	847	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	847	NO	NO

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

## XV. Germany

34. Germany met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 27 April 2008.

35. Tables 62–66 provide detailed information on Germany's initial accounting parameters for the second commitment period under the Kyoto Protocol, its GHG emissions and removals, the holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 62

### Key initial accounting parameters under the Kyoto Protocol for Germany (final values)

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	1 253 599 336	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period <sup>b</sup>	3 592 699 888	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	
Limitation on the additions to Germany's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	351 007 813	t CO <sub>2</sub> eq

*Abbreviation:* NA = not applicable.

<sup>a</sup> The total greenhouse gas emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment.

<sup>b</sup> The assigned amounts of each European Union member State and Iceland are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, paragraph 7 bis, in the Doha Amendment for that member State or Iceland.

<sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the European Union, its member States and Iceland.

Table 63

### Germany's emissions/removals of greenhouse gases in 2015 and 2016

<i>Parameter</i>	<i>Emissions/removals of greenhouse gases (t CO<sub>2</sub> eq)</i>				
	<i>Final values (2017 submission)</i>		<i>Provisional values (2018 submission)</i>		
	<i>Base year</i>	<i>2015</i>	<i>Base year</i>	<i>2015</i>	<i>2016</i>
Emissions of greenhouse gases from sources listed in Annex A to the Kyoto Protocol		901 931 512		906 751 848	909 404 499

Parameter	Emissions/removals of greenhouse gases (t CO <sub>2</sub> eq)				
	Final values (2017 submission)		Provisional values (2018 submission)		
	Base year	2015	Base year	2015	2016
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol (afforestation and reforestation, and deforestation)		-4 593 882		-4 593 897	-4 794 209
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		-54 853 163		-54 648 826	-55 023 952
FMRL (t CO <sub>2</sub> eq per year)		-22 418 000		-22 418 000	-22 418 000
Technical correction to FMRL (t CO <sub>2</sub> eq per year)		NE		NE	NE
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	38 440 460	36 815 559	38 440 460	36 815 748	36 918 548

Abbreviations: FMRL = forest management reference level, LULUCF = land use, land-use change and forestry, NE = not estimated.

Table 64

**Germany's total quantities of Kyoto Protocol units by account type at the end of 2016 (final values)**

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	542 954	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	836 573	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>1 379 527</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 65

**Germany's total quantities of Kyoto Protocol units by account type at the end of 2017 (provisional values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	28 999	NO	1 569 475	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	1 668 235	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>28 999</b>	<b>NO</b>	<b>3 237 710</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 66

**Germany's total transactions of Kyoto Protocol units in 2017 (provisional values)**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	28 999	NO	3 763 731	NO	NO
Total transactions	NO	28 999	NO	3 763 731	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	831 662	NO	NO
External transactions	NO	NO	NO	1 905 548	NO	NO
Total transactions	NO	NO	NO	2 737 210	NO	NO

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

## XVI. Greece

36. Greece met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 29 April 2008.

37. Tables 67–71 provide detailed information on Greece's initial accounting parameters for the second commitment period under the Kyoto Protocol, its GHG emissions and removals, the holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 67

### Key initial accounting parameters under the Kyoto Protocol for Greece (final values)

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	107 564 136	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period <sup>b</sup>	480 791 166	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	
Limitation on the additions to Greece's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	30 117 958	t CO <sub>2</sub> eq

*Abbreviation:* NA = not applicable.

<sup>a</sup> The total greenhouse gas emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment.

<sup>b</sup> The assigned amounts of each European Union member State and Iceland are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, paragraph 7 bis, in the Doha Amendment for that member State or Iceland.

<sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the European Union, its member States and Iceland.

Table 68

### Greece's emissions/removals of greenhouse gases in 2015 and 2016

<i>Parameter</i>	<i>Emissions/removals of greenhouse gases (t CO<sub>2</sub> eq)</i>				
	<i>Final values (2017 submission)</i>		<i>Provisional values (2018 submission)</i>		
	<i>Base year</i>	<i>2015</i>	<i>Base year</i>	<i>2015</i>	<i>2016</i>
Emissions of greenhouse gases from sources listed in Annex A to the Kyoto Protocol		95 715 099		95 310 025	91 607 402
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol (afforestation and reforestation, and deforestation)		–79 510		–79 510	–81 792
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		–2 028 152		–1 949 271	–1 918 215
FMRL (t CO <sub>2</sub> eq per year)		–1 830 000		–1 830 000	–1 830 000
Technical correction to FMRL (t CO <sub>2</sub> eq per year)		91 976		256 671	256 671
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA	NA	NA	NA



Abbreviations: FMRL = forest management reference level, LULUCF = land use, land-use change and forestry, NA = not applicable.

Table 69

**Greece's total quantities of Kyoto Protocol units by account type at the end of 2016  
(final values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

Abbreviations: AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 70

**Greece's total quantities of Kyoto Protocol units by account type at the end of 2017  
(provisional values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 71

**Greece's total transactions of Kyoto Protocol units in 2017 (provisional values)**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

## XVII. Hungary

38. Hungary met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 30 December 2007.

39. Tables 72–76 provide detailed information on Hungary's initial accounting parameters for the second commitment period under the Kyoto Protocol, its GHG emissions and removals, the holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 72

**Key initial accounting parameters under the Kyoto Protocol for Hungary (final values)**

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	109 574 819	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period <sup>b</sup>	434 486 280	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	
Limitation on the additions to Hungary's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	30 680 949	t CO <sub>2</sub> eq

*Abbreviation:* NA = not applicable.

<sup>a</sup> The total greenhouse gas emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment.

<sup>b</sup> The assigned amounts of each European Union member State and Iceland are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, paragraph 7 bis, in the Doha Amendment for that member State or Iceland.

<sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the European Union, its member States and Iceland.

Table 73

**Hungary's emissions/removals of greenhouse gases in 2015 and 2016**

<i>Parameter</i>	<i>Emissions/removals of greenhouse gases (t CO<sub>2</sub> eq)</i>				
	<i>Final values (2017 submission)</i>		<i>Provisional values (2018 submission)</i>		
	<i>Base year</i>	<i>2015</i>	<i>Base year</i>	<i>2015</i>	<i>2016</i>
Emissions of greenhouse gases from sources listed in Annex A to the Kyoto Protocol		61 170 949		61 010 441	61 464 473
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol (afforestation and reforestation, and deforestation)		-1 000 469		-743 316	-631 243
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		-4 343 992		-4 347 190	-3 070 241
FMRL (t CO <sub>2</sub> eq per year)		-1 000 000		-1 000 349	-1 000 349
Technical correction to FMRL (t CO <sub>2</sub> eq per year)		-40 000		-40 373	-40 373
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol		NA		NA	NA

*Abbreviations:* FMRL = forest management reference level, LULUCF = land use, land-use change and forestry, NA = not applicable.

Table 74

**Hungary's total quantities of Kyoto Protocol units by account type at the end of 2016 (final values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>iCERs</i>
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 75

**Hungary's total quantities of Kyoto Protocol units by account type at the end of 2017 (provisional values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	3 872 580	NO	5 329 035	NO	NO
Entity holding accounts	NO	4 314	NO	7 641	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>3 876 894</b>	<b>NO</b>	<b>5 336 676</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 76

**Hungary's total transactions of Kyoto Protocol units in 2017 (provisional values)**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	9 647	NO	NO
Total transactions	NO	NO	NO	9 647	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	9 647	NO	NO
Total transactions	NO	NO	NO	9 647	NO	NO

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

**XVIII. Iceland**

40. Iceland met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 11 May 2008.

41. Tables 77–81 provide detailed information on Iceland's initial accounting parameters for the second commitment period under the Kyoto Protocol, its GHG emissions and removals, the holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 77

**Key initial accounting parameters under the Kyoto Protocol for Iceland (final values)**

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	3 633 558	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period <sup>b</sup>	15 327 217	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	
Limitation on the additions to Iceland's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	1 017 396	t CO <sub>2</sub> eq

*Abbreviation:* NA = not applicable.

<sup>a</sup> The total greenhouse gas emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment.

<sup>b</sup> The assigned amounts of each European Union member State and Iceland are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, paragraph 7 bis, in the Doha Amendment for that member State or Iceland.

<sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the European Union, its member States and Iceland.

Table 78

**Iceland's emissions/removals of greenhouse gases in 2015 and 2016**

Parameter	Emissions/removals of greenhouse gases (t CO <sub>2</sub> eq)				
	Final values (2017 submission)		Provisional values (2018 submission)		
	Base year	2015	Base year	2015	2016
Emissions of greenhouse gases from sources listed in Annex A to the Kyoto Protocol		4 557 174		4 748 615	4 669 337
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol (afforestation and reforestation, and deforestation)		-251 138		-226 785	-232 585
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		-82 237		-86 818	-91 619
FMRL (t CO <sub>2</sub> eq per year)		-154 000		-154 000	-154 000
Technical correction to FMRL (t CO <sub>2</sub> eq per year)		NE		76 950	76 950
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	-347 705	-569 581	-347 705	-569 540	-595 956

Abbreviations: FMRL = forest management reference level, LULUCF = land use, land-use change and forestry, NE = not estimated.

Table 79

**Iceland's total quantities of Kyoto Protocol units by account type at the end of 2016 (final values)**

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 80

**Iceland's total quantities of Kyoto Protocol units by account type at the end of 2017 (provisional values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 81

**Iceland's total transactions of Kyoto Protocol units in 2017 (provisional values)**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

## XIX. Ireland

42. Ireland met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 19 April 2008.

43. Tables 82–86 provide detailed information on Ireland's initial accounting parameters for the second commitment period under the Kyoto Protocol, its GHG emissions and removals, the holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 82

### Key initial accounting parameters under the Kyoto Protocol for Ireland (final values)

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	56 425 830	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period <sup>b</sup>	343 519 892	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	
Limitation on the additions to Ireland's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	15 796 928	t CO <sub>2</sub> eq

*Abbreviation:* NA = not applicable.

<sup>a</sup> The total greenhouse gas emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment, including emissions from the conversion of forests (deforestation) of 8,230 t CO<sub>2</sub> eq.

<sup>b</sup> The assigned amounts of each European Union member State and Iceland are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, paragraph 7 bis, in the Doha Amendment for that member State or Iceland.

<sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the European Union, its member States and Iceland.

Table 83

### Ireland's emissions/removals of greenhouse gases in 2015 and 2016

<i>Parameter</i>	<i>Emissions/removals of greenhouse gases (t CO<sub>2</sub> eq)</i>				
	<i>Final values (2017 submission)</i>		<i>Provisional values (2018 submission)</i>		
	<i>Base year</i>	<i>2015</i>	<i>Base year</i>	<i>2015</i>	<i>2016</i>
Emissions of greenhouse gases from sources listed in Annex A to the Kyoto Protocol		59 878 213		59 426 497	61 545 821
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol (afforestation and reforestation, and		–3 536 298		–3 536 298	–3 655 096



Parameter	Emissions/removals of greenhouse gases (t CO <sub>2</sub> eq)				
	Final values (2017 submission)		Provisional values (2018 submission)		
	Base year	2015	Base year	2015	2016
deforestation)					
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		-529 689		-529 689	-600 059
FMRL (t CO <sub>2</sub> eq per year)		-142 070		-142 070	-142 070
Technical correction to FMRL (t CO <sub>2</sub> eq per year)		-470 854		-571 350	-571 350
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	7 102 695	5 799 415	7 276 178	6 644 490	6 598 542

Abbreviations: FMRL = forest management reference level, LULUCF = land use, land-use change and forestry.

Table 84

**Ireland's total quantities of Kyoto Protocol units by account type at the end of 2016 (final values)**

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	74 964	NO	5 255 000	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>74 964</b>	<b>NO</b>	<b>5 255 000</b>	<b>NO</b>	<b>NO</b>

Abbreviations: AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 85

**Ireland's total quantities of Kyoto Protocol units by account type at the end of 2017 (provisional values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	74 964	NO	5 255 000	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		
<b>Total</b>	<b>NO</b>	<b>74 964</b>	<b>NO</b>	<b>5 255 000</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 86

**Ireland's total transactions of Kyoto Protocol units in 2017 (provisional values)**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	115 965	NO	NO
Total transactions	NO	NO	NO	115 965	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	115 965	NO	NO
Total transactions	NO	NO	NO	115 965	NO	NO

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

## XX. Italy

44. Italy met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 19 April 2008.

45. Tables 87–91 provide detailed information on Italy's initial accounting parameters for the second commitment period under the Kyoto Protocol, its GHG emissions and removals, the holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 87

### Key initial accounting parameters under the Kyoto Protocol for Italy (final values)

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	521 920 601	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period <sup>b</sup>	2 410 291 421	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	
Limitation on the additions to Italy's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	146 137 768	t CO <sub>2</sub> eq

*Abbreviation:* NA = not applicable.

<sup>a</sup> The total greenhouse gas emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment.

<sup>b</sup> The assigned amounts of each European Union member State and Iceland are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, paragraph 7 bis, in the Doha Amendment for that member State or Iceland.

<sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the European Union, its member States and Iceland.

Table 88

### Italy's emissions/removals of greenhouse gases in 2015 and 2016

<i>Parameter</i>	<i>Emissions/removals of greenhouse gases (t CO<sub>2</sub> eq)</i>				
	<i>Final values (2017 submission)</i>		<i>Provisional values (2018 submission)</i>		
	<i>Base year</i>	<i>2015</i>	<i>Base year</i>	<i>2015</i>	<i>2016</i>
Emissions of greenhouse gases from sources listed in Annex A to the Kyoto Protocol		433 024 539		432 878 084	427 861 993
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol (afforestation and reforestation, and deforestation)		–6 829 155		–6 819 810	–6 328 585
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		–31 551 669		–32 464 610	–29 110 271
FMRL (t CO <sub>2</sub> eq per year)		–22 166 000		–22 166 000	–22 166 000
Technical correction to FMRL (t CO <sub>2</sub> eq per year)		NA		–1 680 061	–1 680 061
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	–124 650	–356 299	–124 650	–356 299	–1 362 304

Abbreviations: FMRL = forest management reference level, LULUCF = land use, land-use change and forestry, NA = not applicable.

Table 89

**Italy's total quantities of Kyoto Protocol units by account type at the end of 2016  
(final values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	698 870	NO	975 671	NO	NO
Entity holding accounts	NO	410 076	NO	2 862 425	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>1 108 946</b>	<b>NO</b>	<b>3 838 096</b>	<b>NO</b>	<b>NO</b>

Abbreviations: AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 90

**Italy's total quantities of Kyoto Protocol units by account type at the end of 2017  
(provisional values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	698 870	NO	975 671	NO	NO
Entity holding accounts	NO	402 417	NO	3 123 716	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	7 659	NO	5 367	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>1 108 946</b>	<b>NO</b>	<b>4 104 754</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 91

**Italy's total transactions of Kyoto Protocol units in 2017 (provisional values)**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	647 472	NO	NO
Total transactions	NO	NO	NO	647 472	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	7 659	NO	5 367	NO	NO
External transactions	NO	NO	NO	387 635	NO	NO
Total transactions	NO	7 659	NO	393 002	NO	NO

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

**XXI. Kazakhstan**

46. The eligibility of Kazakhstan to participate in the flexibility mechanisms under the Kyoto Protocol had not been established<sup>6</sup> as at 31 August 2018.

47. Tables 92–94 provide detailed information on Kazakhstan's initial accounting parameters for the second commitment period under the Kyoto Protocol, its GHG emissions and removals and the holdings of Kyoto Protocol units by account type in 2016.

Table 92

**Key initial accounting parameters under the Kyoto Protocol for Kazakhstan (provisional values)**

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	389 104 468	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	95	per cent

<sup>6</sup> See decision 11/CMP.1, annex, paragraphs 2 and 3, in conjunction with decision 1/CMP.8; decision 9/CMP.1, annex, paragraphs 21 and 22; and decision 3/CMP.1, annex, paragraphs 31 and 32.

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period	2 957 193 957	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>b</sup>	NA	
Limitation on the additions to Kazakhstan's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	Value not reported	

*Abbreviation:* NA = not applicable.

<sup>a</sup> The total greenhouse gas emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment.

<sup>b</sup> Kazakhstan did not have a quantified emission limitation or reduction commitment in the first commitment period of the Kyoto Protocol.

Table 93

**Kazakhstan's emissions/removals of greenhouse gases in 2015 and 2016**

<i>Parameter</i>	<i>Emissions/removals of greenhouse gases (t CO<sub>2</sub> eq)</i>				
	<i>Final values (2017 submission)</i>		<i>Provisional values (2018 submission)</i>		
	<i>Base year</i>	<i>2015</i>	<i>Base year</i>	<i>2015</i>	<i>2016</i>
Emissions of greenhouse gases from sources listed in Annex A to the Kyoto Protocol		298 069 639		323 712 034	329 066 113
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol (afforestation and reforestation, and deforestation)		-343 567		-3 113 000	-3 273 233
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		-10 758 874		-6 828 207	-5 529 155
FMRL (t CO <sub>2</sub> eq per year) <sup>a</sup>		NA		NA	NA
Technical correction to FMRL (t CO <sub>2</sub> eq per year)					
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	2 882 000	-19 961 333	3 409 633	-8 290 333	-8 191 333

*Abbreviations:* FMRL = forest management reference level, LULUCF = land use, land-use change and forestry, NA = not applicable.

<sup>a</sup> Kazakhstan had not yet submitted information on its FMRL in accordance with the guidelines outlined in part I of appendix II to decision 2/CMP.6, and therefore it has no value for its FMRL inscribed in the appendix to the annex to decision 2/CMP.7.

Table 94

**Kazakhstan's total quantities of Kyoto Protocol units by account type at the end of 2016 (final values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
Total	NO	NO	NO	NO	NO	NO

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

48. As at 31 August 2018 Kazakhstan had not yet submitted standard electronic format tables for the year 2017.

## XXII. Latvia

49. Latvia met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 29 April 2008.

50. Tables 95–99 provide detailed information on Latvia's initial accounting parameters for the second commitment period under the Kyoto Protocol, its GHG emissions and removals, the holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 95

### Key initial accounting parameters under the Kyoto Protocol for Latvia (final values)

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	26 409 077	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period <sup>b</sup>	76 633 439	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	
Limitation on the additions to Latvia's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	7 394 541	t CO <sub>2</sub> eq

*Abbreviation:* NA= not applicable.

<sup>a</sup> The total greenhouse gas emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment.

<sup>b</sup> The assigned amounts of each European Union member State and Iceland are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, paragraph 7 bis, in the Doha Amendment for that member State or Iceland.

<sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the European Union, its member States and Iceland.

Table 96

**Latvia's emissions/removals of greenhouse gases in 2015 and 2016**

Parameter	Emissions/removals of greenhouse gases (t CO <sub>2</sub> eq)				
	Final values (2017 submission)		Provisional values (2018 submission)		
	Base year	2015	Base year	2015	2016
Emissions of greenhouse gases from sources listed in Annex A to the Kyoto Protocol		11 319 390		11 334 662	11 306 386
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol (afforestation and reforestation, and deforestation)		1 679 445		44 150	38 123
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		-2 534 435		-2 452 245	-3 553 153
FMRL (t CO <sub>2</sub> eq per year)		-16 302 000		-16 302 000	-16 302 000
Technical correction to FMRL (t CO <sub>2</sub> eq per year)		11 703 392		11 703 392	11 703 392
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA, NO	NA, NO	NA, NO	NA, NO	NA, NO

*Abbreviations:* FMRL = forest management reference level, LULUCF = land use, land-use change and forestry, NA = not applicable, NO = not occurring.

Table 97

**Latvia's total quantities of Kyoto Protocol units by account type at the end of 2016 (final values)**

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	5 317	NO	21 550	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO



<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>5 317</b>	<b>NO</b>	<b>21 550</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 98

**Latvia's total quantities of Kyoto Protocol units by account type at the end of 2017 (provisional values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	5 317	NO	21 550	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>5 317</b>	<b>NO</b>	<b>21 550</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 99

**Latvia's total transactions of Kyoto Protocol units in 2017 (provisional values)**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Total transactions	NO	NO	NO	NO	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

### XXIII. Liechtenstein

51. Liechtenstein met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 22 April 2008.

52. Tables 100–104 provide detailed information on Liechtenstein's initial accounting parameters for the second commitment period under the Kyoto Protocol, its GHG emissions and removals, the holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 100

#### Key initial accounting parameters under the Kyoto Protocol for Liechtenstein (final values)

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	231 554	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	84	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period	1 556 044	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight	–410 191	t CO <sub>2</sub> eq
Limitation on the additions to Liechtenstein's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	64 169	t CO <sub>2</sub> eq

<sup>a</sup> The total greenhouse gas emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment.

Table 101

#### Liechtenstein's emissions/removals of greenhouse gases in 2015 and 2016

<i>Parameter</i>	<i>Emissions/removals of greenhouse gases (t CO<sub>2</sub> eq)</i>				
	<i>Final values (2017 submission)</i>		<i>Provisional values (2018 submission)</i>		
	<i>Base year</i>	<i>2015</i>	<i>Base year</i>	<i>2015</i>	<i>2016</i>
Emissions of greenhouse gases from sources listed in Annex A to the Kyoto Protocol		199 389		198 592	188 037
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol (afforestation and reforestation, and deforestation)		4 306		4 162	4 149
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		–1 826		–262	–2 173

Parameter	Emissions/removals of greenhouse gases (t CO <sub>2</sub> eq)				
	Final values (2017 submission)		Provisional values (2018 submission)		
	Base year	2015	Base year	2015	2016
FMRL (t CO <sub>2</sub> eq per year)		100		100	100
Technical correction to FMRL (t CO <sub>2</sub> eq per year)		259		259	259
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol				NO	NO

Abbreviations: FMRL = forest management reference level, LULUCF = land use, land-use change and forestry, NO = not occurring.

Table 102

**Liechtenstein's total quantities of Kyoto Protocol units by account type at the end of 2016 (final values)**

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

Abbreviations: AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 103

**Liechtenstein's total quantities of Kyoto Protocol units by account type at the end of 2017 (provisional values)**

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
Party holding accounts	NO	NO	NO	209 603	NO	NO

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>209 603</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 104

**Liechtenstein's total transactions of Kyoto Protocol units in 2017 (provisional values)**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	220 151	NO	NO
Total transactions	NO	NO	NO	220 151	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	10 548	NO	NO
Total transactions	NO	NO	NO	10 548	NO	NO

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

**XXIV. Lithuania**

53. Lithuania met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 22 April 2008.

54. Tables 105–109 provide detailed information on Lithuania's initial accounting parameters for the second commitment period under the Kyoto Protocol, its GHG

emissions and removals, the holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 105

**Key initial accounting parameters under the Kyoto Protocol for Lithuania (final values)**

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	48 196 540	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period <sup>b</sup>	113 600 821	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	
Limitation on the additions to Lithuania's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	13 495 031	t CO <sub>2</sub> eq

*Abbreviation:* NA= not applicable.

<sup>a</sup> The total greenhouse gas emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment.

<sup>b</sup> The assigned amounts of each European Union member State and Iceland are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, paragraph 7 bis, in the Doha Amendment for that member State or Iceland.

<sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the European Union, its member States and Iceland.

Table 106

**Lithuania's emissions/removals of greenhouse gases in 2015 and 2016**

<i>Parameter</i>	<i>Emissions/removals of greenhouse gases (t CO<sub>2</sub> eq)</i>				
	<i>Final values (2017 submission)</i>		<i>Provisional values (2018 submission)</i>		
	<i>Base year</i>	<i>2015</i>	<i>Base year</i>	<i>2015</i>	<i>2016</i>
Emissions of greenhouse gases from sources listed in Annex A to the Kyoto Protocol		20 096 210		20 174 970	20 082 893
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol (afforestation and reforestation, and deforestation)		-262 262		-381 347	-413 853
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		-7 916 776		-7 517 058	-9 465 950
FMRL (t CO <sub>2</sub> eq per year)		-4 552 000		-4 552 000	-4 552 000
Technical correction to FMRL (t CO <sub>2</sub> eq per year)		-922 000		-922 000	-922 000
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol		NA		NA	NA

*Abbreviations:* FMRL = forest management reference level, LULUCF = land use, land-use change and forestry, NA = not applicable.

Table 107

**Lithuania's total quantities of Kyoto Protocol units by account type at the end of 2016  
(final values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	633 399	NO	229 828	NO	NO
Entity holding accounts	NO	1 693 601	NO	17 138	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>2 327 000</b>	<b>NO</b>	<b>246 966</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 108

**Lithuania's total quantities of Kyoto Protocol units by account type at the end of 2017  
(provisional values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	633 399	NO	229 828	NO	NO
Entity holding accounts	NO	1 693 601	NO	17 138	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>2 327 000</b>	<b>NO</b>	<b>246 966</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 109

**Lithuania's total transactions of Kyoto Protocol units in 2017 (provisional values)**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

**XXV. Luxembourg**

55. Luxembourg met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 29 April 2008.

56. Tables 110–114 provide detailed information on Luxembourg's initial accounting parameters for the second commitment period under the Kyoto Protocol, its GHG emissions and removals, the holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 110

**Key initial accounting parameters under the Kyoto Protocol for Luxembourg (final values)**

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	13 141 245	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period <sup>b</sup>	72 454 473	t CO <sub>2</sub> eq

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	
Limitation on the additions to Luxembourg's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	3 604 402	t CO <sub>2</sub> eq

*Abbreviation:* NA = not applicable.

<sup>a</sup> The total greenhouse gas emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment, including emissions from the conversion of forests (deforestation) of 268,381 t CO<sub>2</sub> eq.

<sup>b</sup> The assigned amounts of each European Union member State and Iceland are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, paragraph 7 bis, in the Doha Amendment for that member State or Iceland.

<sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the European Union, its member States and Iceland.

Table 111

**Luxembourg's emissions/removals of greenhouse gases in 2015 and 2016**

<i>Parameter</i>	<i>Emissions/removals of greenhouse gases (t CO<sub>2</sub> eq)</i>				
	<i>Final values (2017 submission)</i>		<i>Provisional values (2018 submission)</i>		
	<i>Base year</i>	<i>2015</i>	<i>Base year</i>	<i>2015</i>	<i>2016</i>
Emissions of greenhouse gases from sources listed in Annex A to the Kyoto Protocol		10 268 935		10 274 565	10 028 280
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol (afforestation and reforestation, and deforestation)		-130 731		-130 731	-129 858
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		-306 473		-306 473	-390 230
FMRL (t CO <sub>2</sub> eq per year)		-418 000		-418 000	-418 000
Technical correction to FMRL (t CO <sub>2</sub> eq per year)		181 680		181 680	181 680
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA	NA	NA	NA

*Abbreviations:* FMRL = forest management reference level, LULUCF = land use, land-use change and forestry, NA = not applicable.

Table 112

**Luxembourg's total quantities of Kyoto Protocol units by account type at the end of 2016 (final values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>iCERs</i>
Party holding accounts	NO	NO	NO	718 220	NO	NO
Entity holding accounts	NO	NO	NO	18 029	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO



<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>736 249</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 113

**Luxembourg's total quantities of Kyoto Protocol units by account type at the end of 2017 (provisional values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	NO	NO	1 466 923	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>1 466 923</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 114

**Luxembourg's total transactions of Kyoto Protocol units in 2017 (provisional values)**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	540 759	NO	NO
Total transactions	NO	NO	NO	540 759	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	337 091	NO	NO
Total transactions	NO	NO	NO	337 091	NO	NO

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

**XXVI. Malta**

57. The eligibility of Malta to participate in the flexibility mechanisms under the Kyoto Protocol had not been established<sup>7</sup> as at 31 August 2018.

58. Tables 115–119 provide detailed information on Malta's initial accounting parameters for the second commitment period under the Kyoto Protocol, its GHG emissions and removals, the holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 115

**Key initial accounting parameters under the Kyoto Protocol for Malta (final values)**

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	1 974 638	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period <sup>b</sup>	9 299 769	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	
Limitation on the additions to Malta's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	552 898	t CO <sub>2</sub> eq

*Abbreviation:* NA = not applicable.

<sup>a</sup> The total greenhouse gas emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment.

<sup>b</sup> The assigned amounts of each European Union member State and Iceland are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, paragraph 7 bis, in the Doha Amendment for that member State or Iceland.

<sup>7</sup> See decision 11/CMP.1, annex, paragraphs 2 and 3, in conjunction with decision 1/CMP.8; decision 9/CMP.1, annex, paragraphs 21 and 22; and decision 3/CMP.1, annex, paragraphs 31 and 32.

<sup>c</sup> Malta did not have a quantified emission limitation or reduction commitment in the first commitment period of the Kyoto Protocol.

Table 116

**Malta's emissions/removals of greenhouse gases in 2015 and 2016**

Parameter	Emissions/removals of greenhouse gases (t CO <sub>2</sub> eq)				
	Final values (2017 submission)		Provisional values (2018 submission)		
	Base year	2015	Base year	2015	2016
Emissions of greenhouse gases from sources listed in Annex A to the Kyoto Protocol		2 226 865		2 225 140	1 909 754
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol (afforestation and reforestation, and deforestation)		NO		NO	NO
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		NE, NO		NE, NO	NE, NO
FMRL (t CO <sub>2</sub> eq per year)		–49 000		–49 000	–49 000
Technical correction to FMRL (t CO <sub>2</sub> eq per year)		49 000		49 000	49 000
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol		NE, NO		NE, NO	NE, NO

*Abbreviations:* FMRL = forest management reference level, LULUCF = land use, land-use change and forestry, NE = not estimated, NO = not occurring.

Table 117

**Malta's total quantities of Kyoto Protocol units by account type at the end of 2016 (final values)**

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 118

**Malta's total quantities of Kyoto Protocol units by account type at the end of 2017 (provisional values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 119

**Malta's total transactions of Kyoto Protocol units in 2017 (provisional values)**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
<i>Subtractions</i>						

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

## XXVII. Monaco

59. Monaco met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 7 September 2008.

60. Tables 120–124 provide information on Monaco's initial accounting parameters for the second commitment period under the Kyoto Protocol, its GHG emissions and removals, the holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 120

### Key initial accounting parameters under the Kyoto Protocol for Monaco (final values)

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	99 319	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	78	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period	619 751	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight	–92 460	t CO <sub>2</sub> eq
Limitation on the additions to Monaco's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	27 809 000	t CO <sub>2</sub> eq

<sup>a</sup> The total greenhouse gas emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment.

Table 121

### Monaco's emissions/removals of greenhouse gases in 2015 and 2016

<i>Parameter</i>	<i>Emissions/removals of greenhouse gases (t CO<sub>2</sub> eq)</i>				
	<i>Final values (2017 submission)</i>		<i>Provisional values (2018 submission)</i>		
	<i>Base year</i>	<i>2015</i>	<i>Base year</i>	<i>2015</i>	<i>2016</i>
Emissions of greenhouse gases from sources listed in Annex A to the Kyoto Protocol		81 709		82 141	78 616
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol (afforestation and reforestation, and deforestation)				NO	NO
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals				NO	NO
FMRL (t CO <sub>2</sub> eq per year)				NA	NA
Technical correction to FMRL (t CO <sub>2</sub> eq per year)					

Parameter	Emissions/removals of greenhouse gases (t CO <sub>2</sub> eq)				
	Final values (2017 submission)		Provisional values (2018 submission)		
	Base year	2015	Base year	2015	2016
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol			NO	NO	NO

*Abbreviations:* FMRL = forest management reference level, LULUCF = land use, land-use change and forestry, NA = not applicable, NO = not occurring.

Table 122

**Monaco's total quantities of Kyoto Protocol units by account type at the end of 2016 (final values)**

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 123

**Monaco's total quantities of Kyoto Protocol units by account type at the end of 2017 (provisional values)**

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 124

**Monaco's total transactions of Kyoto Protocol units in 2017 (provisional values)**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

**XXVIII. Netherlands**

61. The Netherlands met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 21 April 2008.

62. Tables 125–129 provide detailed information on the initial accounting parameters of the Netherlands for the second commitment period under the Kyoto Protocol, its GHG emissions and removals, the holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 125

**Key initial accounting parameters under the Kyoto Protocol for the Netherlands (final values)**

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	223 950 669	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period <sup>b</sup>	924 777 902	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	
Limitation on the additions to the assigned amount of the Netherlands resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	62 495 551	t CO <sub>2</sub> eq

*Abbreviation:* NA = not applicable.

<sup>a</sup> The total greenhouse gas emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment, including emissions from the conversion of forests (deforestation) of 752,270 t CO<sub>2</sub> eq.

<sup>b</sup> The assigned amounts of each European Union member State and Iceland are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, paragraph 7 bis, in the Doha Amendment for that member State or Iceland.

<sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the European Union, its member States and Iceland.

Table 126

**The Netherlands's emissions/removals of greenhouse gases in 2015 and 2016**

<i>Parameter</i>	<i>Emissions/removals of greenhouse gases (t CO<sub>2</sub> eq)</i>				
	<i>Final values (2017 submission)</i>		<i>Provisional values (2018 submission)</i>		
	<i>Base year</i>	<i>2015</i>	<i>Base year</i>	<i>2015</i>	<i>2016</i>
Emissions of greenhouse gases from sources listed in Annex A to the Kyoto Protocol		195 245 673		194 778 847	195 241 560
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol (afforestation and reforestation, and deforestation)		717 456		554 532	527 839
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		-1 390 785		-1 332 664	-1 319 625
FMRL (t CO <sub>2</sub> eq per year)		-1 425 000		-1 425 000	-1 425 000
Technical correction to FMRL (t CO <sub>2</sub> eq per year)		NE		NE	NE
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA	NA	NA	NA

*Abbreviations:* FMRL = forest management reference level, LULUCF = land use, land-use change and forestry, NA = not applicable, NE = not estimated.



Table 127

**The Netherlands' total quantities of Kyoto Protocol units by account type at the end of 2016  
(final values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	NO	NO	465 289	NO	NO
Entity holding accounts	NO	NO	NO	7 015 968	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	80 940	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>7 562 197</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 128

**The Netherlands' total quantities of Kyoto Protocol units by account type at the end of 2017  
(provisional values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	NO	NO	501 598	NO	NO
Entity holding accounts	NO	5 336 075	NO	2 923 456	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	10 000	NO	123 312	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>5 346 075</b>	<b>NO</b>	<b>3 548 366</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 129

**The Netherlands' total transactions of Kyoto Protocol units in 2017 (provisional values)**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	5 346 077	NO	14 241 126	NO	NO
Total transactions	NO	5 346 077	NO	14 241 126	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	10 000	NO	42 372	NO	NO
External transactions	NO	2	NO	18 254 957	NO	NO
Total transactions	NO	10 002	NO	18 297 329	NO	NO

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

## XXIX. Norway

63. Norway met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 22 April 2008.

64. Tables 130–134 provide detailed information on Norway's initial accounting parameters for the second commitment period under the Kyoto Protocol, its GHG emissions and removals, the holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 130

**Key initial accounting parameters under the Kyoto Protocol for Norway (final values)**

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	51 921 771	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	84	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period	348 914 303	t CO <sub>2</sub> eq

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight	-86 925 501	t CO <sub>2</sub> eq
Limitation on the additions to Norway's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	14 538 096	t CO <sub>2</sub> eq

<sup>a</sup> The total greenhouse gas emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment.

Table 131

**Norway's emissions/removals of greenhouse gases in 2015 and 2016**

<i>Parameter</i>	<i>Emissions/removals of greenhouse gases (t CO<sub>2</sub> eq)</i>				
	<i>Final values (2017 submission)</i>		<i>Provisional values (2018 submission)</i>		
	<i>Base year</i>	<i>2015</i>	<i>Base year</i>	<i>2015</i>	<i>2016</i>
Emissions of greenhouse gases from sources listed in Annex A to the Kyoto Protocol		53 908 193		53 871 235	53 242 514
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol (afforestation and reforestation, and deforestation)		2 024 364		1 707 730	1 806 811
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		-28 467 388		-27 797 834	-28 396 132
FMRL (t CO <sub>2</sub> eq per year)					
Technical correction to FMRL (t CO <sub>2</sub> eq per year)					
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	1 765 094	1 857 910	1 705 141	1 774 999	1 770 257

*Abbreviations:* FMRL = forest management reference level, LULUCF = land use, land-use change and forestry.

Table 132

**Norway's total quantities of Kyoto Protocol units by account type at the end of 2016 (final values)**

<i>Account type</i>	<i>AAs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	738 305	NO	11 572 456	NO	NO
Entity holding accounts	NO	NO	NO	1 455 789	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	91 136	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>738 305</b>	<b>NO</b>	<b>13 119 381</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 133

**Norway's total quantities of Kyoto Protocol units by account type at the end of 2017 (provisional values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	738 305	NO	15 945 955	NO	NO
Entity holding accounts	NO	84 848	NO	619 315	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	151 128	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>823 153</b>	<b>NO</b>	<b>16 716 398</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 134

**Norway's total transactions of Kyoto Protocol units in 2017 (provisional values)**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	4 775 495	NO	NO
Total transactions	NO	NO	NO	4 775 495	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	59 992	NO	NO
External transactions	NO	5 375 076	NO	1 178 478	NO	NO
Total transactions	NO	5 375 076	NO	1 238 470	NO	NO

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

**XXX. Poland**

65. Poland met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 29 April 2008.

66. Tables 135–139 provide detailed information on Poland's initial accounting parameters for the second commitment period under the Kyoto Protocol, its GHG emissions and removals, the holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 135

**Key initial accounting parameters under the Kyoto Protocol for Poland (final values)**

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	580 020 010	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period <sup>b</sup>	1 583 938 824	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	
Limitation on the additions to Poland's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	162 405 602	t CO <sub>2</sub> eq

*Abbreviation:* NA = not applicable.

<sup>a</sup> The total greenhouse gas emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment.

<sup>b</sup> The assigned amounts of each European Union member State and Iceland are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, paragraph 7 bis, in the Doha Amendment for that member State or Iceland.

<sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the European Union, its member States and Iceland.

Table 136

**Poland's emissions/removals of greenhouse gases in 2015 and 2016**

<i>Parameter</i>	<i>Emissions/removals of greenhouse gases (t CO<sub>2</sub> eq)</i>				
	<i>Final values (2017 submission)</i>		<i>Provisional values (2018 submission)</i>		
	<i>Base year</i>	<i>2015</i>	<i>Base year</i>	<i>2015</i>	<i>2016</i>
Emissions of greenhouse gases from		385 842 889		385 169 884	395 823 526

Parameter	Emissions/removals of greenhouse gases (t CO <sub>2</sub> eq)				
	Final values (2017 submission)		Provisional values (2018 submission)		
	Base year	2015	Base year	2015	2016
sources listed in Annex A to the Kyoto Protocol					
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol (afforestation and reforestation, and deforestation)		-2 550 295		-2 547 977	2 689 574
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		-33 993 786		-31 734 200	-37 830 883
FMRL (t CO <sub>2</sub> eq per year)		-27 133 000		-27 133 000	-27 133 000
Technical correction to FMRL (t CO <sub>2</sub> eq per year)		NA		NA	NA
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA	NA	NA	NA

Abbreviations: FMRL = forest management reference level, LULUCF = land use, land-use change and forestry, NA = not applicable.

Table 137

**Poland's total quantities of Kyoto Protocol units by account type at the end of 2016 (final values)**

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 138

**Poland's total quantities of Kyoto Protocol units by account type at the end of 2017 (provisional values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	37 556 760	NO	42 947 508	NO	NO
Entity holding accounts	NO	17 688	NO	17 949	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	702	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>37 574 448</b>	<b>NO</b>	<b>42 966 159</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 139

**Poland's total transactions of Kyoto Protocol units in 2017 (provisional values)**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	702	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	702	NO	NO

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

## XXXI. Portugal

67. Portugal met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 28 April 2008.

68. Tables 140–144 provide detailed information on Portugal's initial accounting parameters for the second commitment period under the Kyoto Protocol, its GHG emissions and removals, the holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 140

### Key initial accounting parameters under the Kyoto Protocol for Portugal (final values)

Parameter	Value	Unit
Total base-year emissions <sup>a</sup>	65 028 094	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period <sup>b</sup>	429 581 969	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	
Limitation on the additions to Portugal's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	17 010 374	t CO <sub>2</sub> eq

*Abbreviation:* NA = not applicable.

<sup>a</sup> The total greenhouse gas emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment, including emissions from the conversion of forests (deforestation) of 4,276,759 t CO<sub>2</sub> eq.

<sup>b</sup> The assigned amounts of each European Union member State and Iceland are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, paragraph 7 bis, in the Doha Amendment for that member State or Iceland.

<sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the European Union, its member States and Iceland.

Table 141

### Portugal's emissions/removals of greenhouse gases in 2015 and 2016

Parameter	Emissions/removals of greenhouse gases (t CO <sub>2</sub> eq)				
	Final values (2017 submission)		Provisional values (2018 submission)		
	Base year	2015	Base year	2015	2016
Emissions of greenhouse gases from sources listed in Annex A to the Kyoto Protocol		68 915 744		69 577 380	67 775 564
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol (afforestation and reforestation, and deforestation)		–1 316 829		–1 316 828	–375 019
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		–7 898 566		–7 898 566	–2 104 248
FMRL (t CO <sub>2</sub> eq per year)		–6 830 000		–6 830 000	–6 830 000
Technical correction to FMRL (t CO <sub>2</sub> eq per year)		3 302 536		3 286 492	3 286 492
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3,	4 797 894	316 754	4 795 150	316 754	255 650



Parameter	Emissions/removals of greenhouse gases (t CO <sub>2</sub> eq)				
	Final values (2017 submission)		Provisional values (2018 submission)		
	Base year	2015	Base year	2015	2016
paragraph 4, of the Kyoto Protocol					

Abbreviations: FMRL = forest management reference level, LULUCF = land use, land-use change and forestry.

Table 142

**Portugal's total quantities of Kyoto Protocol units by account type at the end of 2016 (final values)**

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	167	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>167</b>	<b>NO</b>	<b>NO</b>

Abbreviations: AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 143

**Portugal's total quantities of Kyoto Protocol units by account type at the end of 2017 (provisional values)**

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 144

**Portugal's total transactions of Kyoto Protocol units in 2017 (provisional values)**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	167	NO	NO
Total transactions	NO	NO	NO	167	NO	NO

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

**XXXII. Romania**

69. Romania met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 18 September 2008.

70. Tables 145–149 provide detailed information on Romania's initial accounting parameters for the second commitment period under the Kyoto Protocol, its GHG emissions and removals, the holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 145

**Key initial accounting parameters under the Kyoto Protocol for Romania (final values)**

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	304 920 568	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period <sup>b</sup>	656 059 490	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	
Limitation on the additions to Romania's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	85 377 759	t CO <sub>2</sub> eq

*Abbreviation:* NA = not applicable.

<sup>a</sup> The total greenhouse gas emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment.

<sup>b</sup> The assigned amounts of each European Union member State and Iceland are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, paragraph 7 bis, in the Doha Amendment for that member State or Iceland.

<sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the European Union, its member States and Iceland.

Table 146

**Romania's emissions/removals of greenhouse gases in 2015 and 2016**

<i>Parameter</i>	<i>Emissions/removals of greenhouse gases (t CO<sub>2</sub> eq)</i>				
	<i>Final values (2017 submission)</i>		<i>Provisional values (2018 submission)</i>		
	<i>Base year</i>	<i>2015</i>	<i>Base year</i>	<i>2015</i>	<i>2016</i>
Emissions of greenhouse gases from sources listed in Annex A to the Kyoto Protocol		116 426 728		116 211 316	112 542 364
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol (afforestation and reforestation, and deforestation)		7 730 091		7 730 190	7 730 262
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		-27 479 098		-27 854 573	-27 867 177
FMRL (t CO <sub>2</sub> eq per year)		-15 444 000		-15 444 000	-15 444 000
Technical correction to FMRL (t CO <sub>2</sub> eq per year)		-3 665 254		-3 665 254	-3 665 254
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol		-1 222 003	-1 698 592	-1 258 616	-1 309 343

*Abbreviations:* FMRL = forest management reference level, LULUCF = land use, land-use change and forestry.

Table 147

**Romania's total quantities of Kyoto Protocol units by account type at the end of 2016 (final values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>iCERs</i>
Party holding accounts	NO	NO	NO	NO	NO	NO

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 148

**Romania's total quantities of Kyoto Protocol units by account type at the end of 2017 (provisional values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	17 860 750	NO	8 578 507	NO	NO
Entity holding accounts	NO	9 975	NO	114 108	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>17 870 725</b>	<b>NO</b>	<b>8 692 615</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 149

**Romania's total transactions of Kyoto Protocol units in 2017 (provisional values)**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

**XXXIII. Slovakia**

71. Slovakia met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 4 February 2008.

72. Tables 150–154 provide detailed information on Slovakia's initial accounting parameters for the second commitment period under the Kyoto Protocol, its GHG emissions and removals, the holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 150

**Key initial accounting parameters under the Kyoto Protocol for Slovakia (final values)**

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	74 271 511	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period <sup>b</sup>	202 268 939	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	
Limitation on the additions to Slovakia's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	20 796 023	t CO <sub>2</sub> eq

*Abbreviation:* NA = not applicable.

<sup>a</sup> The total greenhouse gas emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment.

<sup>b</sup> The assigned amounts of each European Union member State and Iceland are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, paragraph 7 bis, in the Doha Amendment for that member State or Iceland.

<sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the European Union, its member States and Iceland.

Table 151

**Slovakia's emissions/removals of greenhouse gases in 2015 and 2016**

Parameter	Emissions/removals of greenhouse gases (t CO <sub>2</sub> eq)				
	Final values (2017 submission)		Provisional values (2018 submission)		
	Base year	2015	Base year	2015	2016
Emissions of greenhouse gases from sources listed in Annex A to the Kyoto Protocol		41 269 495		40 906 367	41 037 121
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol (afforestation and reforestation, and deforestation)		–400 657		–436 231	–494 431
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		–5 158 639		–5 256 685	–5 092 825
FMRL (t CO <sub>2</sub> eq per year)		–1 084 000		–1 084 000	–1 084 000
Technical correction to FMRL (t CO <sub>2</sub> eq per year)		NA		NA	–1 214 000
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA	NA	NA	NA

*Abbreviations:* FMRL = forest management reference level, LULUCF = land use, land-use change and forestry, NA = not applicable.

Table 152

**Slovakia's total quantities of Kyoto Protocol units by account type at the end of 2016 (final values)**

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 153

**Slovakia's total quantities of Kyoto Protocol units by account type at the end of 2017 (provisional values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 154

**Slovakia's total transactions of Kyoto Protocol units in 2017 (provisional values)**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

## XXXIV. Slovenia

73. Slovenia met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 22 April 2008.

74. Tables 155–159 provide detailed information on Slovenia's initial accounting parameters for the second commitment period under the Kyoto Protocol, its GHG emissions and removals, the holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 155

### Key initial accounting parameters under the Kyoto Protocol for Slovenia (final values)

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	20 327 584	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period <sup>b</sup>	99 425 782	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	
Limitation on the additions to Slovenia's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	5 691 720	t CO <sub>2</sub> eq

*Abbreviation:* NA = not applicable.

<sup>a</sup> The total greenhouse gas emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment.

<sup>b</sup> The assigned amounts of each European Union member State and Iceland are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, paragraph 7 bis, in the Doha Amendment for that member State or Iceland.

<sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the European Union, its member States and Iceland.

Table 156

### Slovenia's emissions/removals of greenhouse gases in 2015 and 2016

<i>Parameter</i>	<i>Emissions/removals of greenhouse gases (t CO<sub>2</sub> eq)</i>				
	<i>Final values (2017 submission)</i>		<i>Provisional values (2018 submission)</i>		
	<i>Base year</i>	<i>2015</i>	<i>Base year</i>	<i>2015</i>	<i>2016</i>
Emissions of greenhouse gases from sources listed in Annex A to the Kyoto Protocol		16 831 164		16 859 927	17 717 560
Net emissions or removals from		506 029		441 472	447 029



Parameter	Emissions/removals of greenhouse gases (t CO <sub>2</sub> eq)				
	Final values (2017 submission)		Provisional values (2018 submission)		
	Base year	2015	Base year	2015	2016
LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol (afforestation and reforestation, and deforestation)					
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		-4 760 211		-4 970 866	-5 013 143
FMRL (t CO <sub>2</sub> eq per year)		-3 171 000		-3 171 000	-3 171 000
Technical correction to FMRL (t CO <sub>2</sub> eq per year)		NE		NE	NE
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA	NA	NA	NA

Abbreviations: FMRL = forest management reference level, LULUCF = land use, land-use change and forestry, NA = not applicable, NE = not estimated.

Table 157

**Slovenia's total quantities of Kyoto Protocol units by account type at the end of 2016 (final values)**

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

Abbreviations: AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 158

**Slovenia's total quantities of Kyoto Protocol units by account type at the end of 2017  
(provisional values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 159

**Slovenia's total transactions of Kyoto Protocol units in 2017 (provisional values)**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

## XXXV. Spain

75. Spain met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 19 April 2008.

76. Tables 160–164 provide detailed information on Spain's initial accounting parameters for the second commitment period under the Kyoto Protocol, its GHG emissions and removals, the holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 160

### Key initial accounting parameters under the Kyoto Protocol for Spain (final values)

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	283 361 698	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period <sup>b</sup>	1 766 877 232	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	
Limitation on the additions to Spain's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	79 341 275	t CO <sub>2</sub> eq

*Abbreviation:* NA = not applicable.

<sup>a</sup> The total greenhouse gas emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment.

<sup>b</sup> The assigned amounts of each European Union member State and Iceland are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, paragraph 7 bis, in the Doha Amendment for that member State or Iceland.

<sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the European Union, its member States and Iceland.

Table 161

### Spain's emissions/removals of greenhouse gases in 2015 and 2016

<i>Parameter</i>	<i>Emissions/removals of greenhouse gases (t CO<sub>2</sub> eq)</i>				
	<i>Final values (2017 submission)</i>		<i>Provisional values (2018 submission)</i>		
	<i>Base year</i>	<i>2015</i>	<i>Base year</i>	<i>2015</i>	<i>2016</i>
Emissions of greenhouse gases from sources listed in Annex A to the Kyoto Protocol		335 661 517		335 809 458	324 706 553
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol (afforestation and reforestation, and deforestation)		–10 856 627		–10 678 037	–9 742 775
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		–26 092 385		–28 944 315	–28 556 598
FMRL (t CO <sub>2</sub> eq per year)		–23 100 000		–23 100 000	–23 100 000
Technical correction to FMRL (t CO <sub>2</sub> eq per year)		NO		NO	NO
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	–1 098 167	–1 996 876	–869 552	–2 278 762	–2 445 938

*Abbreviations:* FMRL = forest management reference level, LULUCF = land use, land-use change and forestry, NO = not occurring.

Table 162

**Spain's total quantities of Kyoto Protocol units by account type at the end of 2016 (final values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	1 842 444	NO	15 108 941	NO	NO
Entity holding accounts	NO	322 954	NO	934 896	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	20 076	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>2 165 398</b>	<b>NO</b>	<b>16 063 913</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 163

**Spain's total quantities of Kyoto Protocol units by account type at the end of 2017 (provisional values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	1 842 444	NO	15 810 683	NO	NO
Entity holding accounts	NO	308 658	NO	1 002 315	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	19 366	NO	217 874	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>2 170 468</b>	<b>NO</b>	<b>17 030 872</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 164

**Spain's total transactions of Kyoto Protocol units in 2017 (provisional values)**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	1 229 938	NO	NO
Total transactions	NO	NO	NO	1 229 938	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	19 366	NO	197 798	NO	NO
External transactions	NO	NO	NO	266 158	NO	NO
Total transactions	NO	19 366	NO	463 956	NO	NO

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

**XXXVI. Sweden**

77. Sweden met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 19 April 2008.

78. Tables 165–169 provide detailed information on Sweden's initial accounting parameters for the second commitment period under the Kyoto Protocol, its GHG emissions and removals, the holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 165

**Key initial accounting parameters under the Kyoto Protocol for Sweden (final values)**

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	72 057 123	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period <sup>b</sup>	315 554 578	t CO <sub>2</sub> eq

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	
Limitation on the additions to Sweden's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	20 175 994	t CO <sub>2</sub> eq

*Abbreviation:* NA = not applicable.

<sup>a</sup> The total greenhouse gas emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment.

<sup>b</sup> The assigned amounts of each European Union member State and Iceland are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, paragraph 7 bis, in the Doha Amendment for that member State or Iceland.

<sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the European Union, its member States and Iceland.

Table 166

**Sweden's emissions/removals of greenhouse gases in 2015 and 2016**

<i>Parameter</i>	<i>Emissions/removals of greenhouse gases (t CO<sub>2</sub> eq)</i>				
	<i>Final values (2017 submission)</i>		<i>Provisional values (2018 submission)</i>		
	<i>Base year</i>	<i>2015</i>	<i>Base year</i>	<i>2015</i>	<i>2016</i>
Emissions of greenhouse gases from sources listed in Annex A to the Kyoto Protocol		53 690 357		53 754 837	52 892 716
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol (afforestation and reforestation, and deforestation)		777 147		943 527	1 198 622
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		–52 982 042		–45 934 347	–46 396 082
FMRL (t CO <sub>2</sub> eq per year)		–41 336 099		–41 336 099	–41 336 099
Technical correction to FMRL (t CO <sub>2</sub> eq per year)		7 268 385		9 156 037	9 156 037
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA	NA	NA	NA

*Abbreviations:* FMRL = forest management reference level, LULUCF = land use, land-use change and forestry, NA = not applicable.

Table 167

**Sweden's total quantities of Kyoto Protocol units by account type at the end of 2016 (final values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	NO	NO	5 223 056	NO	NO
Entity holding accounts	NO	NO	NO	1 440 200	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	56 048	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>6 719 304</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 168

**Sweden's total quantities of Kyoto Protocol units by account type at the end of 2017 (provisional values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	NO	NO	8 922 291	NO	NO
Entity holding accounts	NO	NO	NO	2 321 191	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	97 517	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>11 340 999</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 169

**Sweden's total transactions of Kyoto Protocol units in 2017 (provisional values)**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	6 692 824	NO	NO
Total transactions	NO	NO	NO	6 692 824	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	41 469	NO	NO
External transactions	NO	NO	NO	2 071 129	NO	NO
Total transactions	NO	NO	NO	2 112 598	NO	NO

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

**XXXVII. Switzerland**

79. Switzerland met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 10 March 2008.

80. Tables 170–174 provide detailed information on Switzerland's initial accounting parameters for the second commitment period under the Kyoto Protocol, its GHG emissions and removals, the holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 170

**Key initial accounting parameters under the Kyoto Protocol for Switzerland (final values)**

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	53 706 729	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	84.2	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period	361 768 524	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight	–69 065 389	t CO <sub>2</sub> eq
Limitation on the additions to Switzerland's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	15 037 884	t CO <sub>2</sub> eq

<sup>a</sup> The total greenhouse gas emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment.

Table 171

**Switzerland's emissions/removals of greenhouse gases in 2015 and 2016**

<i>Parameter</i>	<i>Emissions/removals of greenhouse gases (t CO<sub>2</sub> eq)</i>				
	<i>Final values (2017 submission)</i>		<i>Provisional values (2018 submission)</i>		
	<i>Base year</i>	<i>2015</i>	<i>Base year</i>	<i>2015</i>	<i>2016</i>
Emissions of greenhouse gases from sources listed in Annex A to the		48 138 863		47 909 947	48 294 435



Parameter	Emissions/removals of greenhouse gases (t CO <sub>2</sub> eq)				
	Final values (2017 submission)		Provisional values (2018 submission)		
	Base year	2015	Base year	2015	2016
Kyoto Protocol					
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol (afforestation and reforestation, and deforestation)		133 415		104 298	131 835
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		-2 536 439		-2 720 217	-2 433 607
FMRL (t CO <sub>2</sub> eq per year)		220 000		220 000	220 000
Technical correction to FMRL (t CO <sub>2</sub> eq per year)		-1 900 581		-1 900 581	-1 900 581
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA	NA	NA	NA

Abbreviations: FMRL = forest management reference level, LULUCF = land use, land-use change and forestry, NA = not applicable.

Table 172

**Switzerland's total quantities of Kyoto Protocol units by account type at the end of 2016 (final values)**

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
Party holding accounts	NO	NO	NO	15 297	NO	NO
Entity holding accounts	NO	NO	NO	16 275 458	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	854 839	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>17 145 594</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 173

**Switzerland's total quantities of Kyoto Protocol units by account type at the end of 2017 (provisional values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	NO	NO	1 723 552	NO	NO
Entity holding accounts	NO	NO	NO	17 944 551	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	5 794 523					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	1 988 430	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>5 794 523</b>	<b>NO</b>	<b>NO</b>	<b>21 656 533</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 174

**Switzerland's total transactions of Kyoto Protocol units in 2017 (provisional values)**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	15 617 535	NO	NO
Total transactions	NO	NO	NO	15 617 535	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	1 133 591	NO	NO
External transactions	NO	NO	NO	12 928 250	NO	NO
Total transactions	NO	NO	NO	14 061 841	NO	NO

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

## XXXVIII. Ukraine

81. Ukraine met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 29 April 2008.

82. Tables 175–179 provide detailed information on Ukraine's initial accounting parameters for the second commitment period under the Kyoto Protocol, its GHG emissions and removals, the holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 175

### Key initial accounting parameters under the Kyoto Protocol for Ukraine (final values)

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	937 954 204	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	76	per cent
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period	5 702 761 558	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight	2 426 086 209	t CO <sub>2</sub> eq
Limitation on the additions to Ukraine's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	262 627 177	t CO <sub>2</sub> eq

<sup>a</sup> The total greenhouse gas emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment.

Table 176

### Ukraine's emissions/removals of greenhouse gases in 2015 and 2016

<i>Parameter</i>	<i>Emissions/removals of greenhouse gases (t CO<sub>2</sub> eq)</i>				
	<i>Final values (2017 submission)</i>		<i>Provisional values (2018 submission)</i>		
	<i>Base year</i>	<i>2015</i>	<i>Base year</i>	<i>2015</i>	<i>2016</i>
Emissions of greenhouse gases from sources listed in Annex A to the Kyoto Protocol		323 364 932		319 011 814	338 636 090
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol (afforestation and reforestation, and deforestation)		–1 067 240		–1 071 025	–1 242 191
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		–68 962 590		–68 962 590	–67 560 979
FMRL (t CO <sub>2</sub> eq per year)		–48 700 000		–48 700 000	–48 700 000
Technical correction to FMRL (t CO <sub>2</sub> eq per year)		–13 435 000		–13 435 000	–13 435 000
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol		NA		NA	NA

*Abbreviations:* FMRL = forest management reference level, LULUCF = land use, land-use change and forestry, NA = not applicable.

Table 177

**Ukraine's total quantities of Kyoto Protocol units by account type at the end of 2016 (final values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 178

**Ukraine's total quantities of Kyoto Protocol units by account type at the end of 2017 (provisional values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 179

**Ukraine's total transactions of Kyoto Protocol units in 2017 (provisional values)**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

**XXXIX. United Kingdom of Great Britain and Northern Ireland<sup>8</sup>**

83. The United Kingdom of Great Britain and Northern Ireland met all the eligibility criteria and became eligible to participate in all the flexibility mechanisms under the Kyoto Protocol on 11 April 2008.

84. Tables 180–184 provide detailed information on the United Kingdom's initial accounting parameters for the second commitment period under the Kyoto Protocol, its GHG emissions and removals, the holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 180

**Key initial accounting parameters under the Kyoto Protocol for the United Kingdom of Great Britain and Northern Ireland (final values)**

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Total base-year emissions <sup>a</sup>	803 191 325	t CO <sub>2</sub> eq
Quantified emission limitation or reduction commitment inscribed in the third column of Annex B in the Doha Amendment to the Kyoto Protocol or in accordance with Article 4 of the Kyoto Protocol	80	per cent

<sup>8</sup> In 2017 the geographical coverage of the United Kingdom's inventory changed to exclude the territory of Bermuda.

<i>Parameter</i>	<i>Value</i>	<i>Unit</i>
Assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment for the second commitment period <sup>b</sup>	2 744 937 332	t CO <sub>2</sub> eq
Difference between the assigned amount for the second commitment period and the average annual emissions for the first three years of the first commitment period, multiplied by eight <sup>c</sup>	NA	
Limitation on the additions to the United Kingdom's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	224 824 677	t CO <sub>2</sub> eq

*Abbreviation:* NA = not applicable.

<sup>a</sup> The total greenhouse gas emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment, including emissions from the conversion of forests (deforestation) of 246,048 t CO<sub>2</sub> eq.

<sup>b</sup> The assigned amounts of each European Union member State and Iceland are equal to the emission levels agreed under the terms of the joint fulfilment agreement and the results of the application of Article 3, paragraph 7 bis, in the Doha Amendment for that member State or Iceland.

<sup>c</sup> This difference is calculated on the basis of the joint assigned amount of the European Union, its member States and Iceland.

Table 181

**The United Kingdom of Great Britain and Northern Ireland's emissions/removals of greenhouse gases in 2015 and 2016**

<i>Parameter</i>	<i>Emissions/removals of greenhouse gases (t CO<sub>2</sub> eq)</i>				
	<i>Final values (2017 submission)</i>		<i>Provisional values (2018 submission)</i>		
	<i>Base year</i>	<i>2015</i>	<i>Base year</i>	<i>2015</i>	<i>2016</i>
Emissions of greenhouse gases from sources listed in Annex A to the Kyoto Protocol		506 044 111		510 502 796	485 495 645
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol (afforestation and reforestation, and deforestation)		128 750		-712 993	-706 997
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		-18 661 791		-23 005 624	-22 100 801
FMRL (t CO <sub>2</sub> eq per year)		-8 268 000		-8 268 000	-8 268 000
Technical correction to FMRL (t CO <sub>2</sub> eq per year)		-7 566 000		-14 515 000	-14 515 000
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	7 737 723	6 800 065	7 641 808	6 656 082	6 516 465

*Abbreviations:* FMRL = forest management reference level, LULUCF = land use, land-use change and forestry.

Table 182

**The United Kingdom of Great Britain and Northern Ireland's total quantities of Kyoto Protocol units by account type at the end of 2016 (final values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>iCERs</i>
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	2 463 229	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	362 188	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>2 825 417</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 183

**The United Kingdom of Great Britain and Northern Ireland's total quantities of Kyoto Protocol units by account type at the end of 2017 (provisional values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	2	NO	2 887 912	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	655 749	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>2</b>	<b>NO</b>	<b>3 543 661</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 184

**The United Kingdom of Great Britain and Northern Ireland's total transactions of Kyoto Protocol units in 2017 (provisional values)**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	2	NO	6 359 998	NO	NO
Total transactions	NO	2	NO	6 359 998	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	293 561	NO	NO
External transactions	NO	NO	NO	5 641 754	NO	NO
Total transactions	NO	NO	NO	5 935 315	NO	NO

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

## **XL. Parties without quantified emission limitation or reduction commitments for the second commitment period of the Kyoto Protocol**

85. In accordance with decisions 2/CMP.8, paragraph 4, and 3/CMP.11, paragraph 14, Parties included in Annex I without a quantified emission limitation or reduction commitment inscribed in the third column of Annex B in the Doha Amendment (Japan, New Zealand and Russian Federation) shall continue to report information on land use, land-use change and forestry activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol for the second commitment period as well as relevant information on their national registry, or changes thereto, including information on the units in the registry, if their registry is connected to the international transaction log at any time during the relevant calendar year. This chapter contains the relevant information reported by those Parties as well as information reported by them on a voluntary basis for transparency purposes.

### **A. Japan**

86. Tables 185–188 provide detailed information on Japan's GHG emissions and removals, the holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 185

**Japan's emissions/removals of greenhouse gases in 2015 and 2016**

<i>Parameter</i>	<i>Emissions/removals of greenhouse gases (t CO<sub>2</sub> eq)</i>				
	<i>Final values (2017 submission)</i>		<i>Provisional values (2018 submission)</i>		
	<i>Base year</i>	<i>2015</i>	<i>Base year</i>	<i>2015</i>	<i>2016</i>
Emissions of greenhouse gases from sources listed in Annex A to the		1 324 717 744		1 323 164 089	1 306 670 175



Parameter	Emissions/removals of greenhouse gases (t CO <sub>2</sub> eq)				
	Final values (2017 submission)		Provisional values (2018 submission)		
	Base year	2015	Base year	2015	2016
Kyoto Protocol					
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol (afforestation and reforestation, and deforestation)		385 539		241 068	909 489
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		-49 362 619		-49 012 940	-46 861 952
FMRL (t CO <sub>2</sub> eq per year)		0		0	0
Technical correction to FMRL (t CO <sub>2</sub> eq per year)		1 127 875		1 448 651	1 590 200
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	11 021 384	2 373 512	11 020 905	2 775 851	3 178 559

Abbreviations: FMRL = forest management reference level, LULUCF = land use, land-use change and forestry.

Table 186

**Japan's total quantities of Kyoto Protocol units by account type at the end of 2016 (final values)**

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
Party holding accounts	NO	NO	NO	144 367	NO	NO
Entity holding accounts	NO	NO	NO	485 593	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>629 960</b>	<b>NO</b>	<b>NO</b>

Abbreviations: AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 187

**Japan's total quantities of Kyoto Protocol units by account type at the end of 2017 (provisional values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	NO	NO	316 130	NO	NO
Entity holding accounts	NO	NO	NO	898 302	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>1 214 432</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 188

**Japan's total transactions of Kyoto Protocol units in 2017 (provisional values)**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	584 472	NO	NO
Total transactions	NO	NO	NO	584 472	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

## B. New Zealand

87. Tables 189–193 provide detailed information on New Zealand's initial accounting parameters for the second commitment period under the Kyoto Protocol, its GHG emissions and removals, the holdings of Kyoto Protocol units by account type and transactions of Kyoto Protocol units.

Table 189

### Key initial accounting parameters under the Kyoto Protocol for New Zealand (voluntarily reported values)

Parameter	Value	Unit
Total base-year emissions <sup>a</sup>	65 828 380	t CO <sub>2</sub> eq
Limitation on the additions to the New Zealand's assigned amount resulting from forest management under Article 3, paragraph 4, of the Kyoto Protocol	18 431 946	t CO <sub>2</sub> eq

<sup>a</sup> The total greenhouse gas emissions in the base year defined under the Kyoto Protocol for the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, in the Doha Amendment.

Table 190

### New Zealand's emissions/removals of greenhouse gases in 2015 and 2016

Parameter	Emissions/removals of greenhouse gases (t CO <sub>2</sub> eq)				
	Final values (2017 submission)		Provisional values (2018 submission)		
	Base year	2015	Base year	2015	2016
Emissions of greenhouse gases from sources listed in Annex A to the Kyoto Protocol		80 155 143		80 703 006	78 726 918
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol (afforestation and reforestation, and deforestation)		–12 535 323		–13 763 696	–14 710 873
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals		–12 106 227		–18 119 672	–14 858 115
FMRL (t CO <sub>2</sub> eq per year)		11 150 000		11 150	11 150
Technical correction to FMRL (t CO <sub>2</sub> eq per year)		–17 245 261		–17 500	–17 500
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol		NA, NE		NA, NE	NA, NE

Abbreviations: FMRL = forest management reference level, LULUCF = land use, land-use change and forestry, NA = not applicable, NE = not estimated.

Table 191

### New Zealand's total quantities of Kyoto Protocol units by account type at the end of 2016 (final values)

Account type	AAUs	ERUs	RMUs	CERs	tCERs	ICERs
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 192

**New Zealand's total quantities of Kyoto Protocol units by account type at the end of 2017 (provisional values)**

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
Party holding accounts	NO	NO	NO	NO	NO	NO
Entity holding accounts	NO	NO	NO	NO	NO	NO
Retirement account	NO	NO	NO	NO	NO	NO
Previous period surplus reserve account	NO					
Article 3.3/3.4 net source cancellation accounts	NO	NO	NO	NO		
Non-compliance cancellation account	NO	NO	NO	NO		
Voluntary cancellation account	NO	NO	NO	NO	NO	NO
Cancellation account for remaining units after carry-over	NO	NO	NO	NO	NO	NO
Article 3.1 ter and quater ambition increase cancellation account	NO					
Article 3.7 ter cancellation account	NO					
tCER cancellation account for expiry					NO	
ICER cancellation account for expiry						NO
ICER cancellation account for reversal of storage						NO
ICER cancellation account for non-submission of certification report						NO
tCER replacement account for expiry	NO	NO	NO	NO	NO	
ICER replacement account for expiry	NO	NO	NO	NO		
ICER replacement account for reversal of storage	NO	NO	NO	NO		NO

<i>Account type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
ICER replacement account for non-submission of certification report	NO	NO	NO	NO		NO
<b>Total</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

Table 193

**New Zealand's total transactions of Kyoto Protocol units in 2017 (provisional values)**

<i>Transaction type</i>	<i>AAUs</i>	<i>ERUs</i>	<i>RMUs</i>	<i>CERs</i>	<i>tCERs</i>	<i>ICERs</i>
<i>Additions</i>						
Internal transactions		NO	NO			
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO
<i>Subtractions</i>						
Internal transactions	NO	NO	NO	NO	NO	NO
External transactions	NO	NO	NO	NO	NO	NO
Total transactions	NO	NO	NO	NO	NO	NO

*Abbreviations:* AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, NO = not occurring, RMUs = removal units, tCERs = temporary certified emission reductions.

**C. Russian Federation**

88. Table 194 provides detailed information on the Russian Federation's annual GHG emissions and removals.

Table 194

**The Russian Federation's emissions/removals of greenhouse gases in 2015 and 2016**

<i>Parameter</i>	<i>Emissions/removals of greenhouse gases (t CO<sub>2</sub> eq)</i>				
	<i>Final values (2017 submission)</i>		<i>Provisional values (2018 submission)</i>		
	<i>Base year</i>	<i>2015</i>	<i>Base year</i>	<i>2015</i>	<i>2016</i>
Emissions of greenhouse gases from sources listed in Annex A to the Kyoto Protocol		2 651 211 999		2 629 877 468	2 643 816 894
Net emissions or removals from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol (afforestation and reforestation, and deforestation)		-179 060		403 829	26 110
Forest management under Article 3, paragraph 4, of the Kyoto Protocol					
Net emissions or removals FMRL (t CO <sub>2</sub> eq per year)		-504 208 314		-532 934 613	-517 508 090
Technical correction to FMRL (t CO <sub>2</sub> eq per year)		6 624 310		-16 607 725	-16 607 725
Net emissions or removals from LULUCF activities (excluding forest management) under Article 3, paragraph 4, of the Kyoto Protocol	NA	NA	NA	NA	NA

*Abbreviations:* FMRL = forest management reference level, LULUCF = land use, land-use change and forestry, NA = not applicable.