

Framework Convention on Climate Change

Distr.: General 20 September 2017

Original: English

Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol Thirteenth session

Bonn, 6-17 November 2017

Item 9(b) of the provisional agenda Reporting from and review of Parties included in Annex I¹ Annual compilation and accounting report for the second commitment period for Annex B Parties under the Kyoto Protocol

Annual compilation and accounting report for Annex B Parties under the Kyoto Protocol for 2017

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 2017; and data on greenhouse gas emissions for Parties included in Annex I1 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 2016 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 2017 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.

¹ The term "Party included in Annex I" is defined in Article 1, paragraph 7, of the Kyoto Protocol.







FCCC/KP/CMP/2017/3

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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.² 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 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, of the Doha Amendment to the Kyoto Protocol as contained in 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, of the Doha Amendment.
- 4. This report covers all 38 Annex B Parties and contains information reported and reviewed as at 6 September 2017³ 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.
- 5. In addition, it includes an overview of the provisional information reported by Parties in 2017 as at 6 September 2017 on: (1) total GHG emissions from the sources listed in Annex A to the Kyoto Protocol reported for 2014 and 2015; (2) GHG emissions and removals from LULUCF activities under Article 3, paragraph 3, forest management under

² Decision 15/CMP.1, paragraph 2.

The accounting parameters presented in this report are based on the final values available in the initial review reports published as at 6 September 2017; 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 has been completed, the associated values are presented as final; and where it is still pending, the values are provisional.

Article 3, paragraph 4, and any other elected activities under Article 3, paragraph 4, of the Kyoto Protocol for 2014 and 2015; and (3) transactions and holdings of Kyoto Protocol units as at 31 December 2016.

- 6. Some of the information presented in this report, particularly that reported in 2017, is provisional. The final values will be made available upon completion of the review of the initial reports and the annual review of the GHG inventories submitted in 2017 and resolution of any questions of implementation, and will be presented in future reports, as appropriate.
- 7. 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.
- 8. 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/2017/3/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 that do not have commitments inscribed in the third column of Annex B in the Doha Amendment (Japan, New Zealand and Russian Federation).
- 9. The initial reports, initial review reports and annual submissions of GHG inventories and accounting information reported by Parties are available on the UNFCCC website.⁴

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

10. 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

11. As at 6 September 2017, 37 Annex B Parties⁵ 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"⁶) for 31 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 initial reports of Annex B Parties for the second commitment period and publication of initial review reports

Annex B Party	Doha Amendment acceptance date	Second commitment period initial report original submission date	Second commitment period initial review report publication date
Australia	9 November 2016	7 May 2016	26 April 2017
Austria	_	15 June 2016	31 May 2017
Belarus a	_	_	_
Belgium	_	15 June 2016	20 June 2017
Bulgaria	_	27 May 2016	21 June 2017
Croatia	_	15 June 2016	28 March 2017
Cyprus	10 December 2015	15 June 2016	_
Czechia	_	15 June 2016	31 August 2017

⁴ http://unfccc.int/10116.php and http://unfccc.int/9499.php.

⁵ Belarus had not yet submitted its initial report by 6 September 2017.

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

	Doha Amendment	Second commitment period initial	Second commitment period initial
Annex B Party	acceptance date	report original submission date	review report publication date
Denmark	_	15 June 2016	9 August 2017
Estonia	_	15 June 2016	22 March 2017
European Union	_	23 September 2016	_
Finland	_	29 June 2016	15 March 2017
France	_	16 June 2016	26 July 2017
Germany	_	15 June 2016	12 April 2017
Greece	_	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	_	17 June 2016	20 July 2017
Italy	18 July 2016	15 April 2016	31 May 2017
Kazakhstan	_	4 July 2017	_
Latvia	_	15 June 2016	7 March 2017
Liechtenstein	23 February 2015	15 April 2016	_
Lithuania	_	16 June 2016	6 March 2017
Luxembourg	_	1 August 2016	30 August 2017
Malta	_	29 July 2016	21 July 2017
Monaco	27 December 2013	4 August 2017	_
Netherlands	_	15 June 2016	23 June 2017
Norway	12 June 2014	15 April 2016	27 March 2017
Poland	_	14 June 2016	20 June 2017
Portugal	_	15 June 2016	5 September 2017
Romania	3 May 2016	15 June 2016	21 June 2017
Slovakia	_	15 June 2016	3 March 2017
Slovenia	_	15 June 2016	22 August 2017
Spain	_	13 June 2016	14 July 2017
Sweden	_	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	_	1 July 2016	_

^a Party had not yet submitted its initial report as at 6 September 2017.

- 12. As at 6 September 2017, all 38 Annex B Parties had submitted the common reporting format table component of their 2017 annual GHG inventory, with 37 Parties⁷ also having submitted their national inventory report. Thirty-six of those 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.⁸
- 13. As at 6 September 2017, 34 Annex B Parties had also submitted standard electronic format (SEF) tables for the period from 1 January to 31 December 2016. 9

B. Status of eligibility

- 14. 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.
- 15. The status of eligibility will be updated in the compilation and accounting database once the annual review of the relevant information reported in 2017 has been completed and any questions of implementation have been resolved.

⁷ Monaco had not yet submitted its national inventory report as at 6 September 2017.

⁸ Belarus and Monaco had not yet submitted such information as at 6 September 2017.

As at 6 September 2017, Belarus, Kazakhstan, Malta and Monaco had not yet submitted SEF tables for the second commitment period of the Kyoto Protocol for the period from 1 January to 31 December 2016.

 $\begin{tabular}{ll} Table 2 \\ \textbf{Status of eligibility of Annex B Parties to participate in the Kyoto Protocol mechanisms} \end{tabular}$

		Last change in eligibility status
Annex B Party	Status	(date and time) ^a
Australia	E	11 July 2009, 00:00:01
Austria	E	5 April 2008, 00:00:01
Belarus b	_	_
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 ^b	_	_
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 ^b	_	
Latvia	Е	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 ^b	_	
Monaco	Е	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 E	11 April 2008, 00:00:01
Omicu Kinguoiii	E	11 April 2006, 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.

^a All times are in Greenwich Mean Time.

^b The eligibility of the Party to participate in the flexibility mechanisms under the Kyoto Protocol had not been established as at 6 September 2017. 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

16. Table 3 shows the base years chosen for the accounting of fluorinated gases (i.e. hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF₆) and nitrogen trifluoride (NF₃)), 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, of the Doha Amendment.

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

- 17. Article 3, paragraphs 8 and 8 bis, of the Doha Amendment allow any Party included in Annex I¹⁰ to use 1995 as its base year for HFCs, PFCs and SF₆ and 1995 or 2000 as the base year for total emissions of NF₃ for the purpose of calculating its assigned amount pursuant to Article 3, paragraph 7 bis, of 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.
- 18. The total GHG emissions of 37 Annex B Parties¹¹ in the base year¹² amounted to 7,878.8 million tonnes of carbon dioxide equivalent (Mt CO₂ eq), including total GHG emissions of 7,725.2 Mt CO₂ 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 CO₂ eq.

Table 3

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

-	Base y	ear defined under th Protocol ^a	he Kyoto		Emission reduction/ limitation	
Party	CO_2 , CH_4 and N_2O	HFCs, PFCs and SF ₆	NF_3	Base-year emissions ^b (t CO ₂ eq)	target (% of base year level ^c)	Assigned amount (t CO ₂ eq)
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
$Belarus^d$	_	_	_	-	_	_
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 ^e	1990	1995	1995	5 560 247	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 ^{e, f}	1990	1990 or 1995	1995 or 2000	5 879 036 636	80.0	37 625 402 324
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–	1995	1995	109 574 819	80.0	434 486 280

¹⁰ The term "Party included in Annex I" is defined in Article 1, paragraph 7, of the Kyoto Protocol.

¹¹ 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.

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

	Base ye	ar defined under i Protocol ^a	the Kyoto		Emission reduction/	
Party	CO ₂ , CH ₄ and N ₂ O	HFCs, PFCs and SF ₆	NF_3	Base-year emissions ^b (t CO ₂ eq)	limitation target (% of base year level ^c)	Assigned amount (t CO ₂ eq)
	1987					
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 ^{g, h}	1990	1995	Value not reported	389 104 468	95.0	2 957 193 957
Latvia	1990	1995	1995	26 409 077	80.0	76 633 439
Liechtenstein ^e	1990	1990	1990	233 756	84.0	1 570 840
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
Monacog	1990	1995	1990	99 312	78.0	619 707
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 ^e	1990	1995	1995	803 200 000	80.0	2 744 937 332
Total ⁱ				7 878 843 286		51 509 851 039

Note: The information in this table is based on the final values available in the initial review reports published as at 6 September 2017, unless stated otherwise (see table footnotes).

^a Parties included in Annex I may choose to use 1995 as the base year for total emissions of HFCs, PFCs, SF₆ and 1995 or 2000 as the base year for emissions of NF₃ in accordance with Article 3, paragraphs 8 and 8 bis, of the Doha Amendment.

^b Refers to the total base-year greenhouse gas emissions used for the calculation of assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, of 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, of the Doha Amendment and decision 13/CMP.1, annex, paragraph 5(b): Australia: 148,163,361 t CO₂ eq; Denmark: 8,807 t CO₂ eq; European Union: 5,517,296 t CO₂ eq; Ireland: 8,230 t CO₂ eq; Luxembourg: 268,381 t CO₂ eq; Netherlands: 752,270 t CO₂ eq; Portugal: 4,276,759 t CO₂ eq; and United Kingdom of Great Britain and Northern Ireland: 246,048 t CO₂ eq.

^c The emission reduction/limitation target is taken from the third column of 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. The joint fulfilment agreement has not as yet been deposited and circulated in accordance with Article 4 of the Kyoto Protocol. However, the secretariat was notified by the European Union of the conditions of the agreement and the intention of the European Union and its member States to deposit it upon ratification of the Doha Amendment at the time of the submission of the report pursuant to decision 2/CMP.8 made in accordance with paragraph 6 of decision 1/CMP.8.

^d Belarus had not yet submitted its initial report for the second commitment period as at 6 September 2017.

^e As at 6 September 2017, the initial review reports for Cyprus, European Union, Liechtenstein and United Kingdom of Great Britain and Northern Ireland had not yet been published. For these Parties the information in this table is based on the provisional values contained in the initial report for the second commitment period as reported by the Parties.

f The assigned amount of the European Union in the table results from the calculation of the percentage (80 per cent) for the European Union, its member States and Iceland 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 of its base year emissions, multiplied by eight (37,625,402,324 t CO₂ eq). As per the initial report of the European Union, this represents the joint assigned amount of the European Union, its member States and Iceland, which is the sum of the assigned amount of the 28

member States and Iceland (21,791,067,463 t CO₂ eq) and the assigned amount of the European Union (15,834,334,860 t CO₂ eq), determined in line with the terms of the joint fulfilment agreement.

- ^g As at 6 September 2017, the review of the initial reports of Kazakhstan and Monaco was in progress; as such, the information in this table is based on the information contained in the initial reports for the second commitment period as reported by the Parties.
- ^h In its initial report, submitted on 4 July 2017, Kazakhstan did not provide a value for the base year for emissions of NF₃.
- ⁱ The total includes the assigned amount of the European Union but does not include the assigned amounts of the individual member States and Iceland, in order to avoid double counting.

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

- 19. Pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, of 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 Annex B in the Doha Amendment of its aggregate anthropogenic CO₂ 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. The joint fulfilment agreement has not as yet been deposited and circulated in accordance with Article 4 of the Kyoto Protocol. However, the secretariat was notified by the European Union of the conditions of the agreement and the intention of the European Union and its member States to deposit it upon ratification of the Doha Amendment at the time of the submission of the report pursuant to decision 2/CMP.8 made in accordance with paragraph 6 of decision 1/CMP.8.
- 20. For the second commitment period, the total assigned amount of 37¹³ Annex B Parties taken together is 51,509,851,039 t CO₂ eq. The assigned amount of the European Union results from the calculation of the percentage (80 per cent) for the European Union, its member States and Iceland inscribed in the third column of Annex B in the Doha Amendment of the base-year emissions, multiplied by eight (37,625,402,324 t CO₂ eq). As per the initial report of the European Union, this represents the joint assigned amount of the European Union, its member States and Iceland, which is the sum of the assigned amount of the 28 member States and Iceland (21,791,067,463 t CO₂ eq) and the assigned amount of the European Union (15,834,334,860 t CO₂ eq), determined in line with the terms of the joint fulfilment agreement.

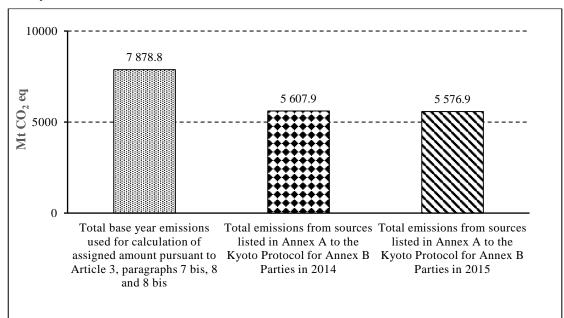
B. Greenhouse gas emissions and removals in 2014 and 2015

- 21. 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 6 September 2017.
- 22. The information on GHG emissions provided here includes indirect CO₂ emissions, where reported.

1. Emissions from sources listed in Annex A to the Kyoto Protocol in 2014 and 2015

23. 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 2015 amounted to 5,577 Mt CO_2 eq. This is 29.2 per cent lower than the base-year level defined under the Kyoto Protocol and 0.6 per cent lower than the 2014 level (see the figure below).

The total includes the assigned amount of the European Union but does not include the assigned amounts of the individual member States and Iceland, in order to avoid double counting. The total also 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 6 September 2017.



Total greenhouse gas emissions for Annex B Parties from sources listed in Annex A to the Kyoto Protocol in 2014 and 2015

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 2014 and 2015, which are based on information submitted in 2017, 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 6 September 2017.

2. Difference in the data for 2014 on emissions from Annex A sources between the 2016 and 2017 submissions

- 24. 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 2016 submissions, which have been reviewed, where applicable, and the values reported in the 2017 submissions, which are the latest available data, the review of which is in progress.
- 25. Total GHG emissions from sources listed in Annex A to the Kyoto Protocol in 2014 reported by Parties in their 2017 submissions amounted to 5,607.9 Mt CO_2 eq. That is 0.5 per cent higher than reported by Annex B Parties for the same year in their 2016 submissions (5,582 Mt CO_2 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

26. Of the Parties that had submitted an initial report as at 6 September 2017, 31 Parties chose to account for LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol for the entire second commitment period (accounting once at the end of the commitment period) and 5 Parties chose to account for them annually. Similarly, 32 Parties chose to account for LULUCF activities under Article 3, paragraph 4, of the Kyoto Protocol for the entire second commitment period (accounting once at the end of the commitment period) and 4 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 included 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

Activity under Article 3, paragraph 4, -	Number of Parties by type of accounting period elected					
of the Kyoto Protocol	No accounting	Annually	Entire commitment period			
Forest management	0	4	32			
Cropland management	27	1	8			
Grazing land management	28	1	7			
Revegetation	32	1	3			
Wetland drainage and rewetting	35	0	1_			

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

27. 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 6 September 2017, 36 Annex B Parties 14 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 2017 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 2014 and 2015 is provided in table 5.

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 2014 and 2015 (provisional values)

Land use, land-use change and forestry activity under Article 3, paragraphs 3 and 4, of the Kyoto Protocol	Number of reporting Parties	Net greenhouse gas emissions or removals (t CO ₂ eq) in 2014	Net greenhouse gas emissions or removals ($t CO_2$ eq) in 2015
Article 3, paragraph 3, activities			
Afforestation and reforestation	32	-76 101 582	-73 664 592
Deforestation	32	81 364 728	74 143 321
Net emissions or removals	33	5 263 146	478 729
Article 3, paragraph 4, activities			
Forest management	33	-557 689 207	-536 534 991
Cropland management	9	26 851 965	26 818 692
Grazing land management	8	34 120 381	30 793 168
Revegetation	4	-21 027 768	-21 864 859
Wetland drainage, and			
rewetting	0		
Net emissions or removals	33	-517 744 629	-500 787 989

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.

28. As at 31 December 2016, 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.

¹⁴ Belarus and Monaco had not yet submitted such information as at 6 September 2017.

4. Difference in the data for 2014 on emissions and removals from land use, land-use change and forestry activities between the 2016 and 2017 submissions

- 29. 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 2014: the values reported in the 2016 submissions, ¹⁵ which have been reviewed, where applicable, and the values reported in the 2017 submissions, ¹⁶ which are the latest available data, the review of which is in progress.
- 30. The net GHG emissions and removals from the above-mentioned activities in 2014 reported by 35 Parties in their 2016 submissions amounted to –407.0 Mt CO₂ eq. Those net GHG removals are 18.5 per cent lower than reported by the same Annex B Parties¹⁷ for 2014 in their 2017 submissions (–512.5 Mt CO₂ eq). The change in value was caused primarily by the recalculations that Parties applied to their GHG inventories.

C. Transactions and holdings of Kyoto Protocol units

- 31. This section provides a provisional overview¹⁸ of additions to and subtractions from the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, of the Doha Amendment at the end of 2016 for the 34 Annex B Parties that reported their SEF tables with information on Kyoto Protocol units in 2017.
- 32. 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

- 33. 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.
- 34. Between 1 January and 31 December 2016, 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 1.9 million CERs into the "voluntary cancellation" account.
- 35. 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 2016.

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In their 2016 annual submissions, Belarus, Kazakhstan 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.

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.

This comparison could not include Kazakhstan as it 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 its 2016 annual submission.

At the time of the preparation of this report, the annual review of the information reported by Annex B Parties in 2017 was still in progress.

Table 6 Total Kyoto Protocol units acquired or transferred through external transactions between 1 January and 31 December 2016^a

Transaction		Kyoto Protocol units by external transaction type (Mt CO ₂ eq)						
		AAUs	ERUs	RMUs	$CERs^b$	tCERs	lCERs	
	Quantities acquired or						,	
Addition	$forwarded^b$	0	0	0	79.4	0	0	
	Parties involved	0	0	0	16	0	0	
G. 1.	Quantities transferred	0	0	0	48.5	0	0	
Subtraction	Parties involved	0	0	0	16	0	0	

Abbreviations: AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, RMUs = removal units, tCERs = temporary certified emission reductions.

2. Holdings of Kyoto Protocol units by holding account type as at 31 December 2016

- 36. For the Annex B Parties that reported information on Kyoto Protocol units pursuant to decisions 13/CMP.1 and 15/CMP.1, there were 112.2 million Kyoto Protocol units by the end of 2016, which included 9.7 million ERUs (3.9 million in the Party holding account of four Parties and 5.8 million in the entity holding account of six Parties) and 102.6 million CERs (43.9 million in the Party holding account of 12 Parties, 55.9 million in the entity holding account of 18 Parties and 2.8 million in the voluntary cancellation account of 13 Parties).
- 37. A summary of the total quantities of the different Kyoto Protocol units by account type as at 31 December 2016 for Annex B Parties¹⁹ is provided in table 7. Table 8 shows the breakdown of total Kyoto Protocol units by Party.
- 38. Detailed information on the status of accounts for each Annex B Party can be found in document FCCC/KP/CMP/2017/3/Add.1.

^a 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.

^b CERs are forwarded by the clean development mechanism registry.

As at 6 September 2017, Belarus, Kazakhstan, Malta and Monaco had not yet submitted SEF tables for the second commitment period of the Kyoto Protocol for the period from 1 January to 31 December 2016.

Table 7
Summary of total quantities^a of Kyoto Protocol units by account type for Annex B Parties as at 31 December 2016 (t CO₂ eq)

Account type	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Party holding accounts	0	3 913 018	0	43 879 626	0	0
Entity holding accounts	0	5 774 793	0	55 862 647	0	0
Retirement account	0	0	0	0	0	0
Previous period surplus reserve	0					
account						
Article 3.3/3.4 net source cancellation	0	0	0	0		
account						
Non-compliance cancellation account	0	0	0	0		
Voluntary cancellation account	0	0	0	2 811 478	0	0
Cancellation account for remaining	0	0	0	0	0	0
units after carry-over	_					
Article 3.1 ter and quarter ambition	0					
increase cancellation account						
Article 3.7 ter cancellation account	0					
tCER cancellation account for expiry					0	
ICER cancellation account for expiry						0
ICER cancellation account for reversal						0
of storage						
ICER cancellation account for non-						0
submission of certification report						
tCER replacement account for expiry	0	0	0	0	0	
ICER replacement account for expiry	0	0	0	0		
ICER replacement account for reversal	0	0	0	0		0
of storage						
ICER replacement account for non-	0	0	0	0		0
submission of certification report						
Total	0	9 687 811	0	102 553 751	0	0

Abbreviations: AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, RMUs = removal units, tCERs = temporary certified emission reductions.

^a "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.

Table 8

Total quantities^a of Kyoto Protocol units for Annex B Parties as at 31 December 2016

		Total	quantity by un	nit type (t CO2 eq)		
Annex B Party	AAUs	ERUs	RMUs	CERs	tCERs	lCERs
Australia	0	0	0	8 339 694	0	0
Austria	0	0	0	564 758	0	0
Belarus b	_	_	_	_	_	_
Belgium	0	3 267 881	0	17 077 275	0	0
Bulgaria	0	0	0	0	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	230 945	0	0
Estonia	0	0	0	0	0	0
European Union	0	0	0	66 905 597	0	0
Finland	0	0	0	1 392 459	0	0
France	0	0	0	35 259	0	0
Germany	0	0	0	1 379 527	0	0
Greece	0	0	0	0	0	0
Hungary	0	0	0	0	0	0
Iceland	0	0	0	0	0	0
Ireland	0	74 964	0	5 255 000	0	0
Italy	0	1 108 946	0	3 838 096	0	0
Kazakhstan ^b	_	_	_	-	-	_
Latvia	0	5 317	0	2 1550	0	0
Liechtenstein	0	0	0	0	0	0
Lithuania	0	2 327 000	0	246 966	0	0
Luxembourg	0	0	0	736 249	0	0
Malta ^b	_	_	_	_	_	_
$Monaco^b$	_	_	=	_	_	_
Netherlands	0	0	0	7 562 197	0	0
Norway	0	738 305	0	13 119 381	0	0
Poland	0	0	0	0	0	0
Portugal	0	0	0	167	0	0
Romania	0	0	0	0	0	0
Slovakia	0	0	0	0	0	0
Slovenia	0	0	0	0	0	0
Spain	0	2 165 398	0	16 063 913	0	0
Sweden	0	0	0	6 719 304	0	0
Switzerland	0	0	0	17 145 594	0	0
Ukraine	0	0	0	0	0	0
United Kingdom	0	0	0	2 825 417	0	0

Abbreviations: AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, ICERs = long-term certified emission reductions, RMUs = removal units, tCERs = temporary certified emission reductions.

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^a "Total quantities" refers to the sum of the Kyoto Protocol units in each account type for each Annex B Party.

^b Party had not yet submitted the standard electronic format tables in 2017 as at 6 September 2017.