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Item 10 of the provisional agenda Annual compilation and accounting report for Annex B Parties under the Kyoto Protocol

Annual compilation and accounting report for Annex B Parties under the Kyoto Protocol for 2013

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. The secretariat published the first report in 2008, which contained the initial accounting parameters. Since 2009, the report, in addition to the key initial accounting parameters, has also contained information on: (a) total greenhouse gas (GHG) emissions from the sources listed in Annex A to the Kyoto Protocol; (b) GHG emissions and removals from land use, land-use change and forestry activities under Article 3, paragraph 3, of the Kyoto Protocol and elected activities under Article 3, paragraph 4, of the Kyoto Protocol; and (c) transactions and holdings of Kyoto Protocol units. Part of the information contained in this document is based on final data recorded in the compilation and accounting database; the rest is based on data in the 2013 annual submissions of Parties to the Convention that are also Parties to the Kyoto Protocol with commitments inscribed in Annex B to the Kyoto Protocol as at 5 October 2013, which are provisional. The final values will be made available upon completion of the annual review for 2013 and resolution of any questions of implementation.



^{*} This document was submitted after the due date in order to take into account the latest submissions from Parties.

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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 Protocol has entered into force for that Party (decision 15/CMP.1). They could also start reporting this information on a voluntary basis from the year following the submission of the information referred to in decision 13/CMP.1, annex, paragraph 6. 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, and, if 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 (RMUs).

2. The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (CMP), by decision 13/CMP.1, requested the secretariat to begin publishing the annual compilation and accounting reports referred to in paragraph 61 of the annex to that decision after completion of the initial review under Article 8 of the Kyoto Protocol and resolution of any question of implementation relating to adjustments under Article 5, paragraph 2, or to the assigned amount pursuant to Article 3, paragraphs 7 and 8, of the Kyoto Protocol, and to forward such reports to the CMP, the Compliance Committee and each Party concerned.

B. Scope of the note

3. To date, the secretariat has published six compilation and accounting reports for Annex B Parties. The first report,¹ containing information on initial accounting parameters for most Annex B Parties, was published in 2008. The second,² third,³ fourth⁴ and fifth⁵ reports, containing information on the initial accounting parameters and relevant supplementary information reported under Article 7, paragraph 1, of the Kyoto Protocol, were published in 2009, 2010, 2011 and 2012, respectively. This document is the sixth report and contains information on the initial accounting parameters and relevant supplementary information reported under Article 7, paragraph 1, of the Kyoto Protocol in 2013.

4. As at 5 October 2013, the initial reviews had been completed for all 38 Annex B Parties. Belarus has submitted its initial report, but the review of the report has not been

¹ FCCC/KP/CMP/2008/9/Rev.1 and FCCC/KP/CMP/2008/9/Add.1 and Add.1/Corr.1.

² FCCC/KP/CMP/2009/15 and Add.1.

³ FCCC/KP/CMP/2010/5 and Add.1.

⁴ FCCC/KP/CMP/2011/8 and Add.1.

⁵ FCCC/KP/CMP/2012/9 and Add.1.

initiated because the amendment to include Belarus in Annex B to the Kyoto Protocol (with a quantified emission reduction commitment of 92 per cent) has not yet entered into force.⁶ On 24 October 2012, the enforcement branch decided that there no longer continues to be a question of implementation with respect to Lithuania's eligibility, and that Lithuania is now fully eligible to participate in the mechanisms under Articles 6, 12 and 17 of the Kyoto Protocol. In accordance with Article 27, paragraph 1, of the Kyoto Protocol, the Government of Canada notified the Secretary-General of the United Nations that it had decided to withdraw from the Kyoto Protocol. That action became effective for Canada on 15 December 2012, in accordance with Article 27, paragraph 2, of the Kyoto Protocol.

This annual compilation and accounting report for 2013 covers all 37 Annex B 5. Parties. In addition to the initial accounting parameters, the report includes an overview of the annual information reported by Parties in 2012 and reviewed as at 5 October 2013:⁷ (a) total GHG emissions from the sources listed in Annex A to the Kyoto Protocol reported for 2010; (b) GHG emissions and removals from LULUCF activities under Article 3, paragraph 3, and elected activities under Article 3, paragraph 4, of the Kyoto Protocol for 2010; and (c) transactions and holdings of Kyoto Protocol units as at 31 December 2011. The report also provides provisional information as reported by Parties in 2013: (a) total GHG emissions from the sources listed in Annex A to the Kyoto Protocol reported for 2010 and 2011; (b) GHG emissions and removals from LULUCF activities under Article 3, paragraph 3, and elected activities under Article 3, paragraph 4, of the Kyoto Protocol for 2010 and 2011; and (c) transactions and holdings of Kyoto Protocol units as at 31 December 2012. This report is interim in nature because some of the information presented, particularly that reported in 2013, is provisional. The final values will be made available upon completion of the annual review of the information reported in 2013 and resolution of any questions of implementation, and will be presented in future reports, as appropriate.

6. Information is also provided on the eligibility of the 37 Annex B Parties to participate in the flexibility mechanisms under the Kyoto Protocol.

7. Detailed information on assigned amounts of individual Annex B Parties and other accounting information provided under the Kyoto Protocol is contained in document FCCC/KP/CMP/2013/6/Add.1. The full annual submissions of GHG inventories and accounting information from Parties, and the compilation and accounting data module of the GHG data interface, are available on the UNFCCC website.⁸

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 consider the information contained in this document and to refer it to the Subsidiary Body for Implementation for its consideration with a view to providing the CMP with recommendations on further action, if required.

⁶ In accordance with paragraphs 159 and 160 of the report of CMP 3 in Bali (FCCC/KP/CMP/2007/9), the CMP requested the Subsidiary Body for Implementation to consider the matter of a review of the initial report of Belarus before the entry into force of the amendment upon fulfilment of the conditions set out in paragraph 160 of that report.

⁷ As at 5 October 2013, the annual review for 2012 had been finalized for all 37 Annex B Parties.

⁸ <http://unfccc.int/national_reports/annex_i_ghg_inventories/national_inventories_submissions/items /7383.php> and <http://unfccc.int/di/FlexibleCADQueries.do>.

II. Status of reporting and eligibility

A. Status of annual submissions and review process

9. As at 5 October 2013, all 37 Annex B Parties had submitted their annual GHG inventories, including both the common reporting format tables and the national inventory reports, for the period from the base year to 2011. All of these Parties also submitted information on GHG emissions and removals from LULUCF activities under Article 3, paragraph 3, and elected activities under Article 3, paragraph 4, of the Kyoto Protocol; while 36^9 of them also submitted standard electronic format (SEF) tables for the period from 1 January to 31 December 2012.

10. The annual reviews of the information reported under Article 7, paragraph 1, of the Kyoto Protocol by Annex B Parties in 2013 have been initiated and are in progress.

B. Status of eligibility

11. 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 and 15/CMP.1 as at 5 October 2013 is provided in table 1. All Annex B Parties are eligible to participate in the flexibility mechanisms with respect to the first commitment period.¹⁰

12. The status of eligibility will be updated in the compilation and accounting database once the annual review of the information reported in 2013 has been completed and questions of implementation, if any, have been resolved.

⁹ In accordance with the annex to decision 14/CMP.1, Iceland and Monaco did not need to report such information in 2013, because they had not transferred or acquired any Kyoto Protocol units prior to 1 January 2013. Regardless, Monaco submitted its SEF table in 2013.

¹⁰ Rules on eligibility with respect to the second commitment period are contained in decision 1/CMP.8, section IV.

Table 1

| Annex B Party | Status | Last change in eligibility status (date and time) ^a |
|-----------------------------|--------|--|
| Australia | Е | 11 July 2009, 00:00:01 |
| Bulgaria | E | 4 February 2011, 15:42:12 |
| Croatia | E | 8 February 2012, 09:53:32 |
| Czech Republic | E | 24 February 2008, 00:00:01 |
| Estonia | E | 15 April 2008, 00:00:01 |
| European Union ^b | E | 18 April 2008, 00:00:01 |
| Austria | E | 5 April 2008, 00:00:01 |
| Belgium | E | 22 April 2008, 00:00:01 |
| Denmark | E | 20 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 |
| Ireland | E | 19 April 2008, 00:00:01 |
| Italy | E | 19 April 2008, 00:00:01 |
| Luxembourg | E | 29 April 2008, 00:00:01 |
| Netherlands | E | 21 April 2008, 00:00:01 |
| Portugal | E | 28 April 2008, 00:00:01 |
| Spain | E | 19 April 2008, 00:00:01 |
| Sweden | E | 19 April 2008, 00:00:01 |
| United Kingdom | E | 11 April 2008, 00:00:01 |
| Hungary | E | 30 December 2007, 00:00:01 |
| Iceland | E | 11 May 2008, 00:00:01 |
| Japan | E | 30 December 2007, 00:00:01 |
| Latvia | E | 29 April 2008, 00:00:01 |
| Liechtenstein | Е | 22 April 2008, 00:00:01 |
| Lithuania | Е | 24 October 2012, 10:47:02 |
| Monaco | E | 7 September 2008, 00:00:01 |
| New Zealand | E | 31 December 2007, 00:00:01 |
| Norway | E | 22 April 2008, 00:00:01 |
| Poland | E | 29 April 2008, 00:00:01 |
| Romania | E | 13 July 2012, 12:42:59 |
| Russian Federation | E | 20 June 2008, 00:00:01 |
| Slovakia | E | 4 February 2008, 00:00:01 |
| Slovenia | E | 22 April 2008, 00:00:01 |
| Switzerland | E | 10 March 2008, 00:00:01 |
| Ukraine | Е | 9 March 2012, 15:32:22 |

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

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 States listed under the European Union were the 15 member States at the time of the deposit by the European Community of its instrument of approval to the Kyoto Protocol on 31 May 2002.

III. Main accounting parameters

A. Key initial accounting parameters

13. Table 2 shows definitions of the base year chosen for the accounting of fluorinated gases (F-gases) (hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride), GHG emissions from the sources listed in Annex A to the Kyoto Protocol in the base year and assigned amounts established pursuant to Article 3, paragraphs 7 and 8, of the Kyoto Protocol.

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

14. Article 3, paragraph 8, of the Kyoto Protocol allows any Party included in Annex I to the Convention to use 1995 as its base year for F-gases, for the purpose of calculating its assigned amount pursuant to Article 3, paragraphs 7 and 8, of the Kyoto Protocol. Accordingly, 23 Annex B Parties elected to use 1995 as the base year for F-gases, while the remaining Parties, excluding the European Union, used the same base year for all GHGs. The European Union has multiple base years (1990 or 1995) for F-gases, depending on the base year elected by the individual member States.

15. The total GHG emissions from 36 Annex B Parties¹¹ in the base year¹² amounted to 12,012.4 million tonnes of carbon dioxide equivalent (Mt CO_2 eq), including total GHG emissions of 11,879.5 Mt CO_2 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 132.9 Mt CO_2 eq.

¹¹ The total includes emissions of the European Union but excludes emissions of the individual member States, in order to avoid double counting.

¹² The total GHG emissions in the base year refers to the total GHG emissions that were used for calculation of assigned amount pursuant to Article 3, paragraphs 7 and 8, of the Kyoto Protocol.

| Table 2 |
|--|
| Base year emissions and assigned amounts for the first commitment period under the |
| Kyoto Protocol |

| | • • | d under the Kyoto cocol ^a | Base year emissions ^b | reduction/li | Emission reduction/limitation arget, % of base year level Assign | |
|---------------------------|--|---|-------------------------------------|--------------|--|-------------------|
| Party | CO ₂ , CH ₄ , N ₂ O | F-gases | $(t \ CO_2 \ eq)$ | Annex B | Article 4 ^c | $(t \ CO_2 \ eq)$ |
| Australia | 1990 | 1990 | 547 699 841 | 108 | - | 2 957 579 143 |
| Bulgaria | 1988 | 1995 | 132 618 658 | 92 | - | 610 045 827 |
| Croatia | 1990 | 1990 | 31 321 790 | 95 | - | 148 778 503 |
| Czech Republic | 1990 | 1995 | 194 248 218 | 92 | - | 893 541 801 |
| Estonia | 1990 | 1995 | 42 622 312 | 92 | - | 196 062 637 |
| European Union | 1990 | 1990 or 1995 | 4 265 517 719 | 92 | 92 | 19 621 381 509 |
| Austria | 1990 | 1990 | 79 049 657 | 92 | 87 | 343 866 009 |
| Belgium | 1990 | 1995 | 145 728 763 | 92 | 92.5 | 673 995 528 |
| Denmark | 1990 | 1995 | 69 978 070 | 92 | 79 | 276 838 955 |
| Finland | 1990 | 1995 | 71 003 509 | 92 | 100 | 355 017 545 |
| France | 1990 | 1990 | 563 925 328 | 92 | 100 | 2 819 626 640 |
| Germany | 1990 | 1995 | 1 232 429 543 | 92 | 79 | 4 868 096 694 |
| Greece | 1990 | 1995 | 106 987 169 | 92 | 125 | 668 669 806 |
| Ireland | 1990 | 1995 | 55 607 836 | 92 | 113 | 314 184 272 |
| Italy | 1990 | 1990 | 516 850 887 | 92 | 93.5 | 2 416 277 898 |
| Luxembourg | 1990 | 1995 | 13 167 499 | 92 | 72 | 47 402 996 |
| Netherlands | 1990 | 1995 | 213 034 498 | 92 | 94 | 1 001 262 141 |
| Portugal | 1990 | 1995 | 60 147 642 | 92 | 127 | 381 937 527 |
| Spain | 1990 | 1995 | 289 773 205 | 92 | 115 | 1 666 195 929 |
| Sweden | 1990 | 1995 | 72 151 646 | 92 | 104 | 375 188 561 |
| United Kingdom | 1990 | 1995 | 779 904 144 | 92 | 87.5 | 3 412 080 630 |
| Hungary | 1985–1987 | 1995 | 115 397 149 | 94 | _ | 542 366 600 |
| Iceland | 1990 | 1990 | 3 367 972 | 110 | _ | 18 523 847 |
| Japan | 1990 | 1995 | 1 261 331 418 | 94 | _ | 5 928 257 666 |
| Latvia | 1990 | 1995 | 25 909 159 | 92 | _ | 119 182 130 |
| Liechtenstein | 1990 | 1990 | 229 483 | 92 | _ | 1 055 623 |
| Lithuania | 1990 | 1995 | 49 414 386 | 92 | _ | 227 306 177 |
| Monaco | 1990 | 1995 | 107 658 | 92 | _ | 495 221 |
| New Zealand | 1990 | 1990 | 61 912 947 | 100 | _ | 309 564 733 |
| Norway | 1990 | 1990 | 49 619 168 | 101 | _ | 250 576 797 |
| Poland | 1988 | 1995 | 563 442 774 | 94 | _ | 2 648 181 038 |
| Romania | 1989 | 1989 | 278 225 022 | 92 | _ | 1 279 835 099 |
| Russian Federation | 1990 | 1995 | 3 323 419 064 | 100 | _ | 16 617 095 319 |
| Slovakia | 1990 | 1990 | 72 050 764 | 92 | _ | 331 433 516 |
| Slovenia | 1986 | 1995 | 20 354 042 | 92 | _ | 93 628 593 |
| Switzerland | 1990 | 1990 | 52 790 957 | 92 | _ | 242 838 402 |
| Ukraine | 1990 | 1990 | 920 836 933 | 100 | _ | 4 604 184 663 |
| Total ^d | | | 12 012 437 434 | | _ | 57 641 914 844 |

Abbreviation: F-gases = fluorinated gases. ^{*a*} Parties included in Annex I to the Convention may choose to use 1995 as the base year for total emissions of fluorinated gases (hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride), in accordance with Article 3, paragraph 8, of the Kyoto Protocol.

^b Refers to the total base year greenhouse gas emissions used for calculation of assigned amount pursuant to Article 3, paragraphs 7 and 8, of the Kyoto Protocol. 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 decision 13/CMP.1, annex, paragraph 5(b): Australia: 131,544,513 t CO₂ eq; Ireland: 4,719 t CO₂ eq; Netherlands: 38,676 t CO₂ eq; Portugal: 981,203 t CO₂ eq; and United Kingdom of Great Britain and Northern Ireland: 365,593 t CO₂ eq.

^c For the first commitment period, 15 member States of the European Union agreed to meet their targets jointly in accordance with Article 4, paragraph 1, of the Kyoto Protocol.

d The total includes the assigned amount of the European Union but does not include the assigned amounts of the individual member States, in order to avoid double counting.

2. Assigned amount pursuant to Article 3, paragraphs 7 and 8, of the Kyoto Protocol

16. The assigned amount pursuant to Article 3, paragraphs 7 and 8, of the Kyoto Protocol for the first commitment period for a Party is calculated as the percentage inscribed for it in Annex B to the Kyoto Protocol of its aggregate anthropogenic CO_2 eq emissions of the GHGs from sources listed in Annex A to the Kyoto Protocol in the base year, multiplied by five. In accordance with Article 4, paragraph 1, of the Kyoto Protocol, the assigned amounts for 15 European Union member States have been calculated under the burden-sharing agreement of the European Union for meeting commitments under the Kyoto Protocol. Based on the information provided in the initial reports, assigned amounts for the first commitment period (2008–2012) had been established for 38 Parties (including Canada and European Union).

17. For the first commitment period, the total assigned amount for $36^{13, 14}$ Annex B Parties taken together is 57,641,914,844 t CO₂ eq. The total assigned amount for the European Union for the first commitment period is 19,621,381,509 t CO₂ eq.

B. Greenhouse gas emissions and removals in 2010 and 2011

1. Emissions from sources listed in Annex A to the Kyoto Protocol in 2010 and 2011

18. Based on the information submitted by Annex B Parties in 2013, the total GHG emissions of Annex B Parties from sources listed in Annex A to the Kyoto Protocol in 2011 amounted to 9,330 Mt CO_2 eq. This is 22.3 per cent lower than the base year level defined under the Kyoto Protocol and 0.2 per cent higher than the 2010 level (see figure 1).

¹³ In accordance with Article 27, paragraph 1, of the Kyoto Protocol, the Government of Canada notified the Secretary-General of the United Nations that it had decided to withdraw from the Kyoto Protocol. That action became effective for Canada on 15 December 2012, in accordance with Article 27, paragraph 2, of the Kyoto Protocol.

⁴ The total includes the assigned amount of the European Union but does not include the assigned amounts of the individual member States, in order to avoid double counting.

Figure 1

Total greenhouse gas emissions for Annex B Parties from sources listed in Annex A to the Kyoto Protocol in 2010 and 2011



Note: The values for the total greenhouse gas emissions from sources listed in Annex A to the Kyoto Protocol for Annex B Parties in 2010 and 2011, which are based on information submitted in 2013, are presented here provisionally and may change depending on the outcomes of the ongoing annual reviews.

2. Difference in the data for 2010 for emissions from Annex A sources between the 2012 and 2013 submissions

19. Two sets of data for GHG emissions from sources listed in Annex A to the Kyoto Protocol are considered in this report: the values reported in the 2012 submissions, which have been reviewed and recorded in the compilation and accounting database, and the values reported in the 2013 submissions, which are the latest available data, the review of which is in progress.

20. Total GHG emissions from sources listed in Annex A to the Kyoto Protocol for 2010 as reported by Parties in 2013 amounted to 9,313.5 Mt CO_2 eq. This is 0.04 per cent lower than the value reported by Annex B Parties in 2012 (9,317.2 Mt CO_2 eq)¹⁵ and reviewed by the expert review teams (ERTs). This change in value is primarily due 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

21. Twenty-eight Parties chose to account for LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol for the entire commitment period (accounting once at the end of the commitment period) and eight chose to account for them annually. Twelve Parties elected not to account for any of the LULUCF activities under Article 3, paragraph 4, of the Kyoto Protocol, while the other Parties chose to account for at least one of them (see table 3).

¹⁵ This value does not take into account the GHG emissions reported by Canada in 2012, for the reason explained in paragraph 4 above.

Table 3

| Summary of methods chosen | by Parties in | 1 accounting | for activities | under Article 3, |
|--------------------------------|---------------|--------------|----------------|------------------|
| paragraph 4, of the Kyoto Prot | cocol | | | |

| 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 | 13 | 5 | 18 | | | |
| Cropland management | 33 | 1 | 2 | | | |
| Grazing land management | 34 | 1 | 1 | | | |
| Revegetation | 33 | 0 | 3 | | | |

Note: The table does not include the European Union, as the Party does not have specific values for the parameters because the land use, land-use change and forestry activities and accounting periods elected for those activities under Article 3, paragraph 4, of the Kyoto Protocol are different for each member State.

22. In accordance with decision 15/CMP.1, 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, and, if any, elected activities under Article 3, paragraph 4, of the Kyoto Protocol at the time when the inventory submission under the Convention is due for the first year of the commitment period of the Kyoto Protocol. As at 5 October 2013 all 37 Annex B Parties had reported such information. A summary of the information provided pursuant to decision 16/CMP.1 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 2010 and 2011 is shown in table 4.

Table 4

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 2010 and 2011

| 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 2010 | Net greenhouse gas emissions or removals (t CO2 eq) in 2011 |
|--|--------------------------------|---|---|
| Article 3, paragraph 3, activities | | | |
| Afforestation and reforestation | 36 | -98 033 500 | -100 158 699 |
| Deforestation | 36 | 107 186 073 | 95 481 635 |
| Net emissions or removals | | 9 152 573 | -4 677 064 |
| Article 3, paragraph 4, activities | | | |
| Forest management | 23 | -995 888 356 | -991 321 865 |
| Cropland management | 3 | 1 480 184 | 827 464 |
| Grazing land management | 2 | -267 131 | -430 029 |
| Revegetation | 3 | -1 912 499 | -1 951 927 |
| Net emissions or removals | | -996 587 802 | -992 876 357 |

23. As at 31 December 2012, eight Parties had issued 537,173,284 RMUs into their national registries resulting from their activities under Article 3, paragraph 3, and elected activities under Article 3, paragraph 4, of the Kyoto Protocol, accounted in accordance with decisions 13/CMP.1 and 16/CMP.1.

4. Difference in the data for 2010 for emissions and removals from land use, land-use change and forestry activities between the 2012 and 2013 submissions

24. There are two sets of data for GHG emissions from LULUCF activities under Article 3, paragraph 3, and elected activities under Article 3, paragraph 4, of the Kyoto Protocol for 2010: values reported in the 2012 submissions, which have been reviewed and recorded in the compilation and accounting database, and values reported in the 2013 submissions, which are the latest available data, the review of which is in progress.

25. The net GHG emissions from the above-mentioned activities for 2010 as reported by Parties in 2013 amounted to -987,435,229 t CO₂ eq. This is 39,506,486 t CO₂ eq (4.0 per cent) higher than the value reported by Annex B Parties in 2012 (-1,026,941,715 t CO₂ eq)¹⁶ and reviewed by the ERTs. This change in value is caused primarily by the recalculations that Parties applied to their GHG inventories.

C. Transactions and holdings of Kyoto Protocol units

26. This section provides a provisional overview¹⁷ of additions to, and subtractions from, the assigned amount pursuant to Article 3, paragraphs 7 and 8, of the Kyoto Protocol at the end of 2012 for the 36 Annex B Parties that reported their SEF tables with information on Kyoto Protocol units in 2013. Two Annex B Parties (Iceland and Monaco) did not need to report such information in 2013, because they had not transferred or acquired any Kyoto Protocol units prior to 1 January 2013.¹⁸ Regardless, Monaco submitted its SEF table in 2013.

1. Transactions of Kyoto Protocol units

27. Decision 14/CMP.1 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.

28. Between 1 January and 31 December 2012, 24 Parties executed at least one form of internal transaction. The transactions were mainly related to: (a) issuance and/or conversion of Kyoto Protocol units in relation to joint implementation projects under Article 6 of the Kyoto Protocol; and (b) cancellation of Kyoto Protocol units, which were reported under the "other cancellation" accounts. Sixteen Parties issued 526,192,335 ERUs into their registries by converting the same amount of AAUs previously issued and held in their national registries, and six Parties issued 511,862,880 RMUs into their national registries. Nine Parties, of which four are European Union member States, transferred 44,316,586 AAUs in aggregate into the "other cancellation" accounts. Ten Parties, of which seven are European Union member States, transferred a total quantity of 1,166,104 CERs into the "other cancellation" accounts. Finally, two Parties, both European Union member States, transferred 66,594 ERUs into the "other cancellation" accounts.

29. Table 5 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 2012.

¹⁶ This value does not take into account the GHG emissions reported by Canada in 2012, for the reason explained in paragraph 4 above.

⁷ At the time of the preparation of this document, the annual review of the information reported by Annex B Parties in 2013 was still in progress.

¹⁸ Decision 14/CMP.1, annex, paragraph 3.

| Transaction | | Kyoto Protocol units by external transaction type (Mt CO2 eq) | | | | | | |
|-------------|---|---|---------|------|----------|-------|-------|--|
| | | AAUs | ERUs | RMUs | $CERs^b$ | tCERs | lCERs | |
| Addition | Quantities acquired or forwarded ^b | 300.8 | 1 097.2 | 5.2 | 880.7 | 2.1 | 0.0 | |
| | Parties involved | 30 | 30 | 3 | 30 | 6 | 0 | |
| Subtraction | Quantities transferred | 300.6 | 1 052.9 | 5.2 | 455.8 | 0.0 | 0.0 | |
| Subtraction | Parties involved | 32 | 30 | 3 | 28 | 0 | 0 | |

Total Kyoto Protocol units acquired or transferred through external transactions between 1 January and 31 December 2012^{*a*}

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*} The figures do not include data on external transactions reported by the 15 individual member States of the European Union, in order to avoid double counting.

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

Table 5

2. Holdings of Kyoto Protocol units by holding account type as at 31 December 2012

30. For the 35¹⁹ Annex B Parties that reported information on Kyoto Protocol units pursuant to decisions 13/CMP.1 and 15/CMP.1, there were 59,247.9 million Kyoto Protocol units by the end of 2012, which included 56,984.7 million AAUs, 656.8 million ERUs, 568.3 million RMUs, 1,036 million CERs and two temporary certified emission reductions in the different holding accounts, including different cancellation and retirement accounts.

31. Figure 2 shows the number of Parties that hold Kyoto Protocol units in different account types. A summary of the total quantities of the different Kyoto Protocol units by account type, as at 31 December 2012, for 35 Annex B Parties is provided in table 6. Table 7 shows the breakdown of total Kyoto Protocol units by Party.

32. Detailed information on the status of accounts for each Annex B Party can be found in document FCCC/KP/CMP/2013/6/Add.1.

Figure 2 Number of Annex B Parties holding Kyoto Protocol units by account type in 2012



Abbreviations: AAUs = assigned amount units, CERs = certified emission reductions, ERUs = emission reduction units, RMUs = removal units.

¹⁹ This figure does not include the European Union, in order to avoid double counting.

| | | Total quantities by unit type ($Mt CO_2 eq$) | | | | | |
|--|----------|--|-------|---------|-------|-------|--|
| Account type | AAUs | ERUs | RMUs | CERs | tCERs | lCERs | |
| Party holding | 48 745.6 | 287.5 | 537.2 | 325.5 | 1 | 0 | |
| Entity holding | 157.3 | 282.5 | 5.7 | 246.3 | 1 | 0 | |
| Article 3, paragraphs 3 and 4, net source cancellation | 133.4 | 0 | 25.1 | 0 | 0 | 0 | |
| Non-compliance cancellation | 0 | 0 | 0 | 0 | 0 | 0 | |
| Other cancellation | 0.559 | 0.093 | 0 | 4.9 | 0 | 0 | |
| Retirement | 7 947.9 | 86.7 | 0 | 459.2 | 0 | 0 | |
| tCER replacement for expiry | 0 | 0 | 0 | 0 | 0 | 0 | |
| ICER replacement for expiry | 0 | 0 | 0 | 0 | 0 | 0 | |
| ICER replacement for reversal in storage | 0 | 0 | 0 | 0 | 0 | 0 | |
| ICER replacement for non-submission of CR | 0 | 0 | 0 | 0 | 0 | 0 | |
| Total | 56 984.7 | 656.8 | 568.3 | 1 036.0 | 2 | 0 | |

Table 6Summary of total quantities^a of Kyoto Protocol units by account type for Annex BParties as at 31 December 2012

Abbreviations: AAUs = assigned amount units, CERs = certified emission reductions, CR = certification report, 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 35 Annex B Parties.

| | | Total qua | ntities by unit typ | $pe(Mt CO_2 eq)$ | | |
|-----------------------------|----------|-----------|---------------------|------------------|--------|-------|
| Annex B Party | AAUs | ERUs | RMUs | CERs | tCERs | lCERs |
| Australia | 2 957.6 | 0 | 46.3 | 0 | 0 | 0 |
| Bulgaria | 565.0 | 10.8 | 0 | 9.1 | 0 | 0 |
| Croatia | 148.8 | 0 | 0 | 0 | 0 | 0 |
| Czech Republic | 747.8 | 4.1 | 0 | 13.5 | 0 | 0 |
| Estonia | 131.1 | 3.76 | 0 | 0.03 | 0 | 0 |
| European Union ^b | 20 146.2 | 502.29 | 37.0 | 737.62 | 0 | 0 |
| Austria | 379.9 | 5.0 | 0 | 22.9 | 0 | 0 |
| Belgium | 644.9 | 3.7 | 0 | 14.9 | 0 | 0 |
| Denmark | 283.6 | 9.3 | 4.16 | 5.4 | 0 | 0 |
| Finland | 355.4 | 6.7 | 0 | 10.1 | 0 | 0 |
| France | 2 899.4 | 22.7 | 32.8 | 53.8 | 0 | 0 |
| Germany | 4 914.1 | 61.2 | 0 | 135.9 | 0 | 0 |
| Greece | 620.3 | 3.0 | 0 | 12.2 | 0 | 0 |
| Ireland | 296.1 | 1.82 | 0 | 8.3 | 1.0 | 0 |
| Italy | 2 378.5 | 10.7 | 0 | 57.3 | 0 | 0 |
| Luxembourg | 49.8 | 0 | 0 | 3.1 | 0 | 0 |
| Netherlands | 1 102.8 | 51.5 | 0 | 45.7 | 0 | 0 |
| Portugal | 365.0 | 1 | 0 | 11.0 | 0 | 0 |
| Spain | 1 723.7 | 12.9 | 0 | 86.9 | 1.0 | 0 |
| Sweden | 365.3 | 1.3 | 0 | 10.2 | 0 | 0 |
| United Kingdom | 3 752.0 | 88.6 | 0 | 64.8 | 0 | 0 |
| Hungary | 508.0 | 3.5 | 3.0 | 5.0 | 0 | 0 |
| Iceland ^c | _ | _ | _ | _ | _ | _ |
| Japan | 6 149.4 | 4.7 | 0 | 130.1 | 1.0 | 0 |
| Latvia | 96.4 | 0 | 0 | 1.11 | 0 | 0 |
| Liechtenstein | 1.2 | 0 | 0 | 0.32 | 0 | 0 |
| Lithuania | 180.4 | 5.0 | 0 | 3.0 | 0 | 0 |
| Monaco | 0 | 0 | 0 | 0 | 0 | 0 |
| New Zealand | 306.0 | 16.15 | 9.1 | 8.7 | 0 | 0 |
| Norway | 271.6 | 1.09 | 0 | 11.0 | 0 | 0 |
| Poland | 2 453.3 | 9.2 | 0 | 48.6 | 0 | 0 |
| Romania | 1 152.9 | 9.6 | 0 | 13.3 | 0 | 0 |
| Russian Federation | 16 377.7 | 27.9 | 471.0 | 0 | 0 | 0 |
| Slovakia | 269.5 | 0 | 0 | 8.9 | ů 0 | 0 |
| Slovenia | 87.2 | 1.42 | ů 0 | 1.5 | ů 0 | 0 |
| Switzerland | 271.5 | 57.0 | 1.87 | 44.3 | ů 0 | 0 |
| Ukraine | 4 163.3 | 0 | 0 | 0 | 0 | 0 |

| Table 7 |
|---|
| Total quantities ^{<i>a</i>} of Kyoto Protocol units for Annex B Parties as at 31 December 2012 |

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 each Annex B Party.

^b The States listed under the European Union were the 15 member States at the time of the deposit by the European Community of its instrument of approval to the Kyoto Protocol on 31 May 2002.

^c Did not submit the standard electronic format table for the submission year 2013, as had not transferred or acquired any Kyoto Protocol units prior to 1 January 2013.