



**Framework Convention on  
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**Conference of the Parties serving as the meeting  
of the Parties to the Kyoto Protocol**  
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Item 13 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 2011**

**Note by the secretariat\***

*Summary*

The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol, by its 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 question of implementation. Accordingly, the secretariat began publishing the report in 2008, which contained only the initial accounting parameters. Since 2009, the document, in addition to the key initial accounting parameters, has also contained annual 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 information recorded in the compilation and accounting database. There are also other parts of information which is based on the 2011 Parties' submission, as at 24 October 2011; this information is provisional. Final values will become available after completion of the annual review for 2011 and resolution of any questions of implementation.

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\* 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. The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (CMP), by its decision 15/CMP.1, requested Parties included in Annex I to the Convention that are also Parties to the Kyoto Protocol with commitments inscribed in Annex B to the Kyoto Protocol (Annex B Parties) 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. They may also start reporting this information on a voluntary basis from the year following the submission of the information referred to in paragraph 6 of the annex to decision 13/CMP.1. 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 a 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 CMP, by its decision 13/CMP.1, requested the secretariat to begin publishing the annual compilation and accounting report 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. In response to the request referred to in paragraph 2 above, as at 24 October 2011 the secretariat had published four compilation and accounting reports for Annex B Parties:

(a) The first report,<sup>1</sup> containing information on initial accounting parameters for most Annex B Parties, was published in 2008;

(b) The second,<sup>2</sup> containing information on the initial accounting parameters as well as relevant supplementary information reported under Article 7, paragraph 1, of the Kyoto Protocol in 2009, was published in 2009;

(c) The third report,<sup>3</sup> containing information on the initial accounting parameters and on relevant supplementary information reported under Article 7, paragraph 1, of the Kyoto Protocol in 2010, was published in 2010;

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

<sup>2</sup> FCCC/KP/CMP/2009/15 and Add.1.

<sup>3</sup> FCCC/KP/CMP/2010/5 and Add.1.

(d) This document is the fourth report<sup>4</sup> containing information on the initial accounting parameters and relevant supplementary information reported under Article 7, paragraph 1, of the Kyoto Protocol in 2011.

4. As at 24 October 2011, 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 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.<sup>5</sup> The expert review team (ERT) finalized the report of the review of the initial report of Croatia on 26 August 2009. The review report contained two questions of implementation relating to the assigned amount and the commitment period reserve of Croatia. Croatia lodged an appeal to the CMP against the final decision of the enforcement branch of the Compliance Committee of the Kyoto Protocol with respect to these two questions of implementation. On 4 August 2011, Croatia withdrew<sup>6</sup> that appeal. The final values of the initial accounting parameters for Croatia will be available once the questions of implementation have been resolved.

5. This annual compilation and accounting report for 2011 covers all 38 Annex B Parties. In addition to the initial accounting parameters, the report includes an overview of the annual information reported by Parties in 2010 and reviewed as at 24 October 2011:<sup>7</sup> (a) total GHG emissions from the sources listed in Annex A to the Kyoto Protocol reported for 2008; (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 2008; and (c) transactions and holdings of Kyoto Protocol units as at 31 December 2009. The report also provides provisional information as reported by Parties in 2011: (a) total GHG emissions from the sources listed in Annex A to the Kyoto Protocol reported for 2008 and 2009; (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 2008 and 2009; and (c) transactions and holdings of Kyoto Protocol units as at 31 December 2010. This report is interim in nature because some parts of the information presented, particularly the parts of the information reported in 2011, are provisional. Final values will become available after completion of the annual review of the information reported in 2011 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 38 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 the addendum to this report. The full annual submissions of GHG inventories and accounting information from Parties are available on the UNFCCC website.<sup>8</sup>

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<sup>4</sup> FCCC/KP/CMP/2011/8 and Add.1.

<sup>5</sup> 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.

<sup>6</sup> FCCC/KP/CMP/2011/2.

<sup>7</sup> As at 24 October 2011, the annual review for 2010 had been finalized for all 38 Annex B Parties except Lithuania, for which the resolution of questions of implementation was still pending.

<sup>8</sup> <[http://unfccc.int/national\\_reports/annex\\_i\\_ghg\\_inventories/national\\_inventories\\_submissions/items/5270.php](http://unfccc.int/national_reports/annex_i_ghg_inventories/national_inventories_submissions/items/5270.php)>.

### 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.

## II. Status of reporting and eligibility

### A. Status of annual submissions and the review process

9. As at 24 October 2011, all 38 Annex B Parties had submitted their annual GHG inventories with 2009 as the latest available inventory year. Thirty-six of these Parties<sup>9</sup> also submitted their standard electronic format (SEF) tables in 2011 for the period from 1 January to 31 December 2010 and, all 38 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. The annual reviews of the information reported under Article 7, paragraph 1, of the Kyoto Protocol by these Parties in 2011 have been initiated and are in progress.

### B. Status of eligibility

10. 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 24 October 2011 is provided in table 1. All Annex B Parties except Croatia, Romania and Ukraine were eligible to participate in the flexibility mechanisms.

11. The status of eligibility will be updated in the compilation and accounting database once the annual review of information reported in 2011 has been completed and questions of implementation, if any, have been resolved.

Table 1

#### 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   |
| Bulgaria                    | E             | 4 February 2011, 15:42:12  |
| Canada                      | E             | 16 June 2008, 09:00:00   |
| Croatia                     | S             | 27 December 2009, 00:00:01   |
| Czech Republic              | E             | 24 February 2008, 00:00:01   |
| Estonia                     | E             | 15 April 2008, 00:00:01  |
| European Union <sup>b</sup> | 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  |

<sup>9</sup> In accordance with the annex to decision 14/CMP.1, Iceland and Monaco did not need to report such information in 2011, because they had not transferred or acquired any Kyoto Protocol units prior to 1 January 2011.

| <i>Annex B Party</i> | <i>Status</i>   | <i>Last change in eligibility status<br/>(date and time)<sup>a</sup></i> |
|----------------------|-----------------|--|
| 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        | E               | 22 April 2008, 00:00:01  |
| Lithuania            | E               | 22 April 2008, 00:00:01  |
| 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              | e2 <sup>c</sup> | 27 August 2011, 11:03:20   |
| 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              | e2 <sup>d</sup> | 12 October 2011, 12:20:10  |

*Abbreviations:* 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; e2 = not considered to meet the eligibility requirements mentioned above, but may issue and transfer emission reduction units for joint implementation projects pursuant to decision 9/CMP.1, annex, paragraph 24; S = not considered to meet one or more of the eligibility requirements under Articles 6, 12 and 17, of the Kyoto Protocol; therefore eligibility is suspended pursuant to decision 27/CMP.1, annex, section XV, paragraph 4.

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

<sup>b</sup> 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.

<sup>c</sup> Romania became eligible to participate in the flexibility mechanisms under the Kyoto Protocol on 18 September 2008, at 00:00:01; however, the enforcement branch suspended Romania's eligibility pending the resolution of the question of implementation relating to its national system on 27 August 2011. Detailed information on the question of implementation with respect to Romania is available at <[http://unfccc.int/kyoto\\_protocol/compliance/items/2875.php](http://unfccc.int/kyoto_protocol/compliance/items/2875.php)>.

<sup>d</sup> Ukraine became eligible to participate in the flexibility mechanisms under the Kyoto Protocol on 29 April 2008, at 00:00:01, however, the enforcement branch suspended Ukraine's eligibility pending the resolution of the question of implementation relating to its national system on 12 October 2011. Detailed information on the question of implementation with respect to Ukraine is available at <[http://unfccc.int/kyoto\\_protocol/compliance/items/2875.php](http://unfccc.int/kyoto_protocol/compliance/items/2875.php)>.

### III. Main accounting parameters

#### A. Key initial accounting parameters

12. 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.

Table 2

#### Base year emissions and assigned amounts for the first commitment period under the Kyoto Protocol

| Party                | Base year <sup>a</sup>                               |         | Base year emissions <sup>b</sup><br>(t CO <sub>2</sub> eq) | Emission reduction/limitation target,<br>% of base year level |                        | Assigned amount<br>(t CO <sub>2</sub> eq) |
|----------------------|--|---------|--|---|------------------------|---|
|                      | CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O | F-gases |  | Annex B   | Article 4 <sup>c</sup> |   |
| Australia            | 1990   | 1990    | 547 699 841  | 108   | –                      | 2 957 579 143                             |
| Bulgaria             | 1988   | 1995    | 132 618 658  | 92  | –                      | 610 045 827                               |
| Canada               | 1990   | 1990    | 593 998 462  | 94  | –                      | 2 791 792 771                             |
| Croatia <sup>d</sup> | –  | –       | –  | –   | –                      | –   |
| 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 | 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                             |

| Party                    | Base year <sup>a</sup>                               |         | Base year emissions <sup>b</sup><br>(t CO <sub>2</sub> eq) | Emission reduction/limitation target,<br>% of base year level |                        | Assigned amount<br>(t CO <sub>2</sub> eq) |
|--------------------------|--|---------|--|---|------------------------|---|
|                          | CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O | F-gases |  | Annex B   | Article 4 <sup>c</sup> |   |
| 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                             |
| <b>Total<sup>e</sup></b> | –  | –       | <b>12 575 114 106</b>                                      | –   | –                      | <b>60 284 929 112</b>                     |

*Abbreviation:* F-gases = fluorinated gases.

<sup>a</sup> 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.

<sup>b</sup> 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 CO<sub>2</sub> eq; Ireland: 4,719 t CO<sub>2</sub> eq; Netherlands: 38,676 t CO<sub>2</sub> eq; Portugal: 981,203 t CO<sub>2</sub> eq; and United Kingdom of Great Britain and Northern Ireland: 365,593 t CO<sub>2</sub> eq.

<sup>c</sup> Fifteen member States of the European Union agreed to meet their targets jointly in accordance with Article 4, paragraph 1, of the Kyoto Protocol.

<sup>d</sup> The initial review process for Croatia has been finalized, but the resolution of questions of implementation from that review was still pending, therefore the initial accounting parameters for Croatia are not available.

<sup>e</sup> 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.

## 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

13. 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. Accordingly, 23 Annex B Parties elected to use 1995 as the base year for F-gases, while the remaining Parties, excluding the European Union (EU), used the same base year for all GHGs. The EU has multiple base years (1990 or 1995) for F-gases, depending on the base year elected by the individual member States.

14. The total GHG emissions from 36 Annex B Parties<sup>10</sup> in the base year<sup>11</sup> used for the calculation of the assigned amount pursuant to Article 3, paragraphs 7 and 8, of the Kyoto Protocol amounted to 12,575.1 million tonnes of carbon dioxide equivalent (Mt CO<sub>2</sub> eq), including total GHG emissions of 12,442.2 Mt CO<sub>2</sub> eq from the sources listed in Annex A to the Kyoto Protocol and emissions from LULUCF activities (net emissions and removals in the base year from the conversion of forests (deforestation)) of 132.9 Mt CO<sub>2</sub> eq.

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

15. 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

<sup>10</sup> The total includes emissions of the EU but does not include emissions of the individual member States 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 calculation of the assigned amount pursuant to Article 3, paragraphs 7 and 8, of the Kyoto Protocol.



inscribed for it in Annex B to the Kyoto Protocol 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 five. In accordance with Article 4, paragraph 1, of the Kyoto Protocol the assigned amounts for 15 EU member States have been calculated under the EU burden-sharing agreement. Based on the information provided in the initial reports, as at 24 October 2011, assigned amounts for the first commitment period (2008–2012) had been established for 37 Parties.

16. For the first commitment period, the total assigned amount<sup>12</sup> for 36 Annex B Parties taken together is 60,284,929,112 t CO<sub>2</sub> eq. The total assigned amount for the EU for the first commitment period is 19,621,381,509 t CO<sub>2</sub> eq.

## B. Greenhouse gas emissions and removals in 2008 and 2009

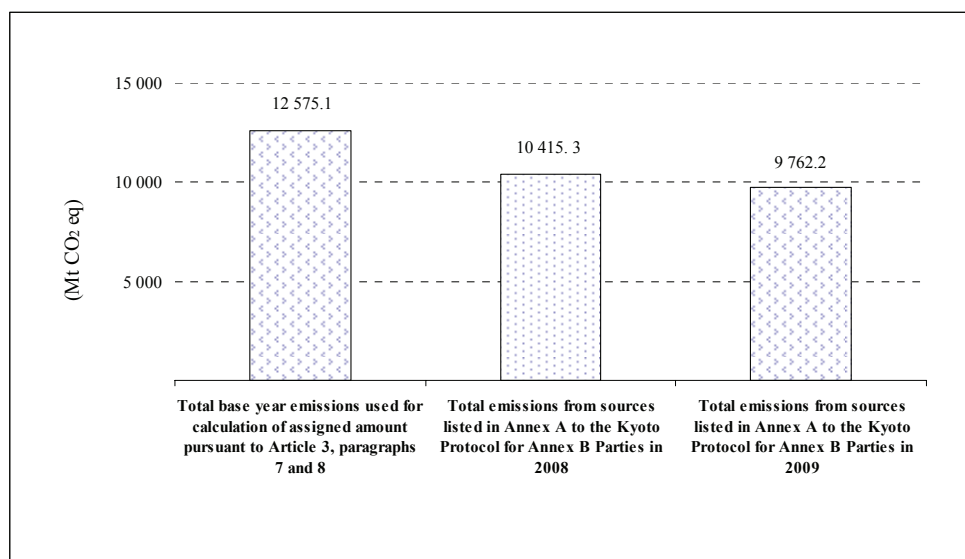
### 1. Emissions from sources listed in Annex A to the Kyoto Protocol in 2008 and 2009

17. In 2011, all 38 Annex B Parties submitted their national GHG inventories, both the common reporting format tables and the national inventory reports, for the period from the base year to 2009. At the time of preparation of this report, the review of the information on emissions from sources listed in Annex A to the Kyoto Protocol for 2008 and 2009 by the ERTs was in progress.

18. In 2009, the total GHG emissions of Annex B Parties from sources listed in Annex A to the Kyoto Protocol amounted to 9,762.2 Mt CO<sub>2</sub> eq. This is 22.4 per cent lower than the base year level defined under the Kyoto Protocol and 6.3 per cent lower than the 2008 level, which is based on information submitted by Annex B Parties in 2011 (see figure 1).

Figure 1

#### Total greenhouse gas emissions for Annex B Parties from sources listed in Annex A to the Kyoto Protocol in 2008 and 2009



*Note:* The values for the total greenhouse gas emissions from sources listed in Annex A to the Kyoto Protocol for Annex B Parties in 2008 and 2009, which are based on the information

<sup>12</sup> The total includes the assigned amount of the EU but does not include the assigned amounts of the individual member States in order to avoid double counting.

submitted in 2011 are presented here provisionally and may change depending on the outcomes of the ongoing annual reviews.

## 2. Difference in the data for 2008 for emissions from Annex A sources between the 2010 and 2011 submissions

19. There are two sets of data for GHG emissions from sources listed in Annex A to the Kyoto Protocol: values reported in the 2010 submissions, which have been reviewed and recorded in the compilation and accounting database, and values reported in the 2011 submissions, which are the latest available data and a review of which is in progress.

20. Total GHG emissions from sources listed in Annex A to the Kyoto Protocol for 2008 as reported by Parties in 2011 amounted to 10,415.3 Mt CO<sub>2</sub> eq. This is 0.06 per cent lower than the value reported by Annex B Parties in 2010 (10,421.29 Mt CO<sub>2</sub> eq) and reviewed by the ERT. This change in value is caused primarily by the recalculations that Parties applied in their GHG inventories.

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

21. Twenty-nine 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).

Table 3

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

| <i>Activities 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   | 14  | 5               | 18                              |
| Cropland management   | 33  | 1               | 3                               |
| Grazing land management   | 35  | 1               | 1                               |
| Revegetation  | 34  | 0               | 3                               |

*Note:* The table does not include the European Union; this 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. According to decision 15/CMP.1, Annex B Parties are required to report, as a part of their annual GHG inventory, 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 24 October 2011, all 38 Parties had reported this 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 2008 and 2009 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 2008 and 2009**

| <i>Land use, land-use change and forestry activities 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 2008</i> | <i>Net greenhouse gas emissions or removals (t CO<sub>2</sub> eq) in 2009</i> |
|---|------------------------------------|---|---|
| Article 3, paragraph 3, activities  |                                    |   |   |
| Afforestation and reforestation   | 37                                 | -126 092 469  | -129 122 924  |
| Deforestation   | 37                                 | 153 028 221   | 135 428 187   |
| Net emissions or removals   |                                    | 26 935 753  | 6 305 263   |
| Article 3, paragraph 4, activities  |                                    |   |   |
| Forest management   | 23                                 | -1 271 050 781  | -1 343 122 892  |
| Cropland management   | 4                                  | -14 006 443   | -16 151 140   |
| Grazing land management   | 2                                  | -1 536 811  | -1 557 312  |
| Revegetation  | 3                                  | -1 242 654  | -1 282 205  |
| Net emissions or removals   |                                    | -1 287 836 689  | -1 362 113 549  |

23. As at 31 December 2010, Parties had not issued any RMUs for 2008 and 2009 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. Such units will be issued following completion of the annual review for 2011 in accordance with Article 8, taking into account any adjustments applied in accordance with Article 5, paragraph 2, of the Kyoto Protocol and the resolution of any questions of implementation relating to the reported net removals of anthropogenic GHGs.

**4. Difference in the data for 2008 for emissions and removals from land use, land-use change and forestry activities between the 2010 and 2011 submissions**

24. There are also 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: values reported in the 2010 submissions, which have been reviewed and recorded in the compilation and accounting database, and values reported in the 2011 submissions which are the latest available data and of which the review is in progress.

25. Total GHG emissions and removals from the above-mentioned activities for 2008 as reported by Parties in 2011 amounted to -1,260,900,936 t CO<sub>2</sub> eq. This is 0.07 per cent lower than the value reported by Annex B Parties in 2010 (-1,182,277,079) and reviewed by the ERT. This change in value is caused primarily by the recalculations that Parties applied in their GHG inventories.

**C. Transactions and holdings of Kyoto Protocol units**

26. This section provides a provisional overview<sup>13</sup> 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 2010 for the 36 Annex B Parties that reported their SEF tables with information on Kyoto Protocol units in 2011. Two Annex B Parties (Iceland and Monaco)

<sup>13</sup> At the time of preparation of this document, the annual review of information reported by Annex B Parties in 2011 was still in progress.

did not need to report such information in 2011, because they had not transferred or acquired any Kyoto Protocol units prior to 1 January 2011.<sup>14</sup>

## 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 concerns the transaction of Kyoto Protocol units from one national registry to another.

28. Between 1 January and 31 December 2010, 21 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. Thirteen Parties have issued 30,954,580 ERUs into their registries by converting the same amount of AAUs previously issued and held in their national registries. Thirteen Parties, of which nine are EU member States, transferred 388,746 AAUs in aggregate into the “other cancellation” accounts. Eleven Parties, of which eight are EU member States, transferred total quantities of 1,137,195 CERs into the “other cancellation” accounts. Finally, three Parties, which are EU member States, transferred 18,982 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 2010.

Table 5

### Total Kyoto Protocol units acquired or transferred through external transactions between 1 January and 31 December 2010<sup>a</sup>

| Transaction type |   | Kyoto Protocol units by external transaction type (Mt CO <sub>2</sub> eq) |      |      |       |       |       |
|------------------|---|---|------|------|-------|-------|-------|
|                  |   | AAUs  | ERUs | RMUs | CERs  | tCERs | ICERs |
| Addition         | Quantities acquired or forwarded <sup>b</sup> | 648.3   | 47.1 | 0.0  | 323.0 | 0.0   | 0.0   |
|                  | Parties involved                              | 30  | 31   | 0    | 31    | 0     | 0     |
| Subtraction      | Quantities transferred                        | 648.3   | 47.1 | 0.0  | 204.4 | 0.0   | 0.0   |
|                  | Parties involved                              | 31  | 25   | 0    | 30    | 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.

<sup>a</sup> The figures do not include data on external transactions reported by the individual 15 member States of the European Union 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 2010

30. For the 35<sup>15</sup> Annex B Parties that reported information on Kyoto Protocol units pursuant to decisions 13/CMP.1 and 15/CMP.1 by the end of 2010, there were 60,726.4 million Kyoto Protocol units, which included 60,228.0 million AAUs, 37.1 million ERUs and 461.3 million CERs, in the different holding accounts, including different cancellations and retirement accounts.

<sup>14</sup> Decision 14/CMP.1, annex, paragraph 3.

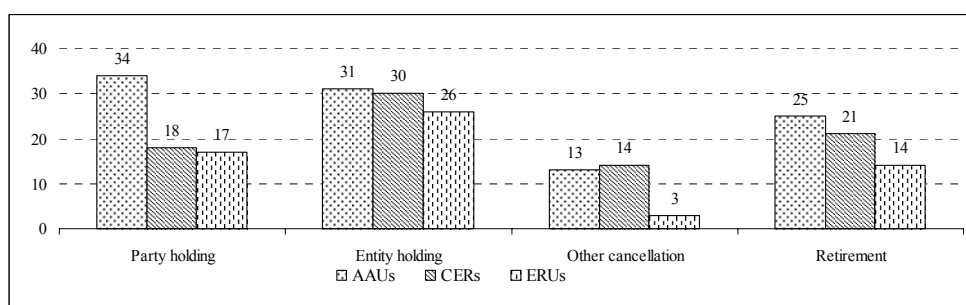
<sup>15</sup> This figure does not include the EU in order to avoid double counting.

31. Figure 2 shows the number of Parties that hold Kyoto Protocol units in different holding accounts. A summary of the total quantities of the different Kyoto Protocol units, as at 31 December 2010, in different account types for 34 Annex B Parties is given in table 6. The breakdown of total Kyoto Protocol units by Party is provided in table 7.

32. Detailed information on the status of accounts for each Annex B Party can be found in document FCCC/KP/CMP/2011/8/Add.1.

Figure 2

**Number of Annex B Parties holding Kyoto Protocol units by account type in 2010**



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

Table 6

**Summary of total quantities<sup>a</sup> of Kyoto Protocol units by account type for Annex B Parties as at 31 December 2010**

| Account type  | Total quantities by unit type (Mt CO <sub>2</sub> eq) |             |          |              |          |          |
|---|---|-------------|----------|--------------|----------|----------|
|   | AAUs  | ERUs        | RMUs     | CERs         | tCERs    | ICERs    |
| Party holding   | 54 522.6  | 10.6        | 0        | 79.8         | 0        | 0        |
| Entity holding  | 2 494.6   | 23.8        | 0        | 214.3        | 0        | 0        |
| Article 3, paragraph 3 and 4, net source cancellation | 0   | 0           | 0        | 0            | 0        | 0        |
| Non-compliance cancellation                           | 0   | 0           | 0        | 0            | 0        | 0        |
| Other cancellation                                    | 0.425   | 0.019       | 0        | 2.6          | 0        | 0        |
| Retirement  | 3 210.5   | 2.646       | 0        | 165.0        | 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        |
| <b>Total</b>  | <b>60 228.0</b>                                       | <b>37.1</b> | <b>0</b> | <b>461.3</b> | <b>0</b> | <b>0</b> |

*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.

<sup>a</sup> "Total quantities" refers to the sum of the Kyoto Protocol units in each account type for the 35 Annex B Parties.

Table 7  
**Total quantities<sup>a</sup> of Kyoto Protocol units for Annex B Parties as at 31 December 2010**

| <i>Annex B Party</i>        | <i>Total quantities 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>lCERs</i> |
| Australia                   | 2 957.6   | 0           | 0           | 0           | 0            | 0            |
| Bulgaria                    | 518.5   | 0           | 0           | 1.0         | 0            | 0            |
| Canada                      | 2 791.8   | 0           | 0           | 0           | 0            | 0            |
| Croatia                     | –   | –           | –           | –           | –            | –            |
| Czech Republic              | 779.5   | 0.5         | 0           | 9.8         | 0            | 0            |
| Estonia                     | 177.3   | 0.2         | 0           | 0.001       | 0            | 0            |
| European Union <sup>b</sup> | 19 851.2  | 23.0        | 0           | 286.08      | 0            | 0            |
| Austria                     | 354.9   | 1.8         | 0           | 11.8        | 0            | 0            |
| Belgium                     | 662.8   | 0           | 0           | 6.0         | 0            | 0            |
| Denmark                     | 282.2   | 4.31        | 0           | 2.3         | 0            | 0            |
| Finland                     | 352.8   | 0.56        | 0           | 5.0         | 0            | 0            |
| France                      | 2 860.6   | 1.22        | 0           | 20.8        | 0            | 0            |
| Germany                     | 4 925.2   | 4.01        | 0           | 86.3        | 0            | 0            |
| Greece                      | 656.9   | 0           | 0           | 0.66        | 0            | 0            |
| Ireland                     | 311.0   | 1.0         | 0           | 7.3         | 0            | 0            |
| Italy                       | 2 416.3   | 0           | 0           | 34.9        | 0            | 0            |
| Luxembourg                  | 49.0  | 0           | 0           | 1.8         | 0            | 0            |
| Netherlands                 | 1 030.1   | 3.8         | 0           | 20.8        | 0            | 0            |
| Portugal                    | 371.8   | 0           | 0           | 6.7         | 0            | 0            |
| Spain                       | 1 635.7   | 1.9         | 0           | 42.5        | 0            | 0            |
| Sweden                      | 370.0   | 0.15        | 0           | 2.8         | 0            | 0            |
| United Kingdom              | 3 571.7   | 4.02        | 0           | 36.0        | 0            | 0            |
| Hungary                     | 518.0   | 1.0         | 0           | 4.0         | 0            | 0            |
| Iceland <sup>c</sup>        | –   | –           | –           | –           | –            | –            |
| Japan                       | 6 085.4   | 2.41        | 0           | 102.9       | 0            | 0            |
| Latvia                      | 86.5  | 0           | 0           | 0.62        | 0            | 0            |
| Liechtenstein               | 41.5  | 0           | 0           | 0.08        | 0            | 0            |
| Lithuania                   | 216.2   | 0.97        | 0           | 2.32        | 0            | 0            |
| Monaco <sup>c</sup>         | –   | –           | –           | –           | –            | –            |
| New Zealand                 | 307.3   | 0.02        | 0           | 0.531       | 0            | 0            |
| Norway                      | 263.9   | 0.43        | 0           | 5.3         | 0            | 0            |
| Poland                      | 2 595.4   | 2.263       | 0           | 24.5        | 0            | 0            |
| Romania                     | 1 216.7   | 1.0         | 0           | 6.7         | 0            | 0            |
| Russian Federation          | 16 612.9  | 0           | 0           | 0           | 0            | 0            |
| Slovakia                    | 289.5   | 0           | 0           | 4.5         | 0            | 0            |
| Slovenia                    | 92.0  | 0           | 0           | 1.3         | 0            | 0            |
| Switzerland                 | 313.0   | 5.3         | 0           | 12.3        | 0            | 0            |
| Ukraine                     | 4 513.9   | 0           | 0           | 0           | 0            | 0            |

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

<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> 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.

<sup>c</sup> Not required to submit the standard electronic format tables for the submission year 2011.