



### **COMPLIANCE COMMITTEE**

CC/ERT/ASR/2017/9 20 July 2017

# Status report of the annual inventory of Estonia

### Note by the secretariat

The status report of the annual inventory of the Estonia was published on 2 June 2017. For purposes of rule 10, paragraph 2, of the Rules of procedure of the Compliance Committee (annex to decision 4/CMP.2, as amended by decisions 4/CMP.4 and 8/CMP.9), the report is considered received by the secretariat on the same date. This report, FCCC/ASR/2017/EST, contained in the annex to this note, is being forwarded to the Compliance Committee in accordance with section VI, paragraph 3, of the annex to decision 27/CMP.1 and paragraph 49 of the annex to decision 22/CMP.1.





Distr.: General 2 June 2017

English only

# Status report of the annual inventory of Estonia

- 1. This status report was prepared by the secretariat pursuant to decision 22/CMP.1 in conjunction with decision 4/CMP.11, as part of the initial check of Estonia's annual inventory, submitted in accordance with decisions 24/CP.19 and 15/CMP.1 in conjunction with decisions 3/CMP.11 and 2/CMP.8. It reflects the content of the 2017 inventory submission as submitted by the Party (dates of submission are provided in the tables on pages 2 and 3).
- 2. In this report, the following abbreviations are used:

CRF: common reporting format

GHG: greenhouse gas

HWP: harvested wood products KP-LULUCF: LULUCF emissions and removals from activities under Article 3,

paragraphs 3 and 4, of the Kyoto Protocol LULUCF: land use, land-use change and

orestry

IPPU: industrial processes and product use

NIR: national inventory report

SBDT: sectoral background data tables SEF: standard electronic format SWDS: solid waste disposal sites

#### Gases

CO<sub>2</sub>: carbon dioxide CH<sub>4</sub>: methane N<sub>2</sub>O: nitrous oxide HFCs: hydrofluorocarbons

MIX: Unspecified mix of HFCs and PFCs

SF<sub>6</sub>: sulphur hexafluoride NF<sub>3</sub>: nitrogen trifluoride NO<sub>X</sub>: nitrogen oxides CO: carbon monoxide

PFCs: perfluorocarbons

NMVOCs: non-methane volatile organic

compounds

SO<sub>2</sub>: sulphur dioxide

Kyoto Protocol units

AAU: assigned amount unit ERU: emission reduction unit

RMU: removal unit

CER: certified emission reduction ICER: long-term certified emission

reduction

tCER: temporary certified emission

reduction

Notation keys

C: confidential

IE: included elsewhere NA: not applicable NE: not estimated NO: not occurring

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|               |   |                              | GRI                            | EENH                | OUSE GAS           | INVE     | NTORY    | SUBMIS                  | SION             |                          |                             |          |                |          |
|---------------|---|------------------------------|--------------------------------|---------------------|--------------------|----------|----------|-------------------------|------------------|--------------------------|-----------------------------|----------|----------------|----------|
|               |   | Date of                      | receipt                        |                     | Date of resi       | ıbmissi  | on       | Commer                  | its              |                          |                             |          |                |          |
|               | NIR   | 12 Ap                        | ril 2017                       |                     |                    |          |          |                         |                  |                          |                             |          |                |          |
|               | CRF tables <sup>a</sup>   | 13 Ap:                       | ril 2017                       | 1                   |                    |          |          |                         |                  |                          |                             |          |                |          |
| d information | Additional information <sup>b</sup> CRF tables provided for years           | 12 Ap                        | ril 2017                       | ,                   |                    |          |          | Annex<br>Annex<br>Annex | A - CS<br>B - Ch | 2 SEF<br>EUR;<br>anges f | Tables;<br>rom EU<br>UCR so |          | /7.0.1-v8<br>e | 8.0.7;   |
| Genera        | CRF tables provided for years   | 1990–                        | 2015                           |                     | 1                  |          |          |                         |                  |                          |                             |          |                |          |
|               | Base year or period <sup>c</sup>  | 1990                         | Base :<br>PFCs                 |                     | or HFCs,           |          | 1995     |                         |                  | Ba<br>NF                 | se year                     | for      | 1995           |          |
|               | Gases covered   | $CO_2$                       | CH <sub>4</sub>                | N <sub>2</sub> O    | HFCs               | PFCs     | MIX      | $SF_6$                  | NF <sub>3</sub>  | $NO_X$                   | CO                          | NN       | IVOCs          | $SO_2$   |
|               |   | <b>√</b>                     | <b>√</b>                       | <b>√</b>            | ✓                  | <b>√</b> | <b>√</b> | <b>✓</b>                | <b>✓</b>         | <b>√</b>                 | <b>✓</b>                    | <b>✓</b> |                | <b>√</b> |
| NIR           | Description   |                              |                                |                     | the NIR reporting  |          |          | ows the                 | structu          | ire outl                 | ined in                     | the U    | NFCCC          |          |
|               | Language of NIR   | Engl                         | ish                            |                     |                    |          |          |                         |                  |                          |                             |          |                |          |
| CRF® tables   | Source categories accomore of Party's aggregatives included in Air Protocol | ounting<br>gate em<br>nnex A | for 7% issions to the <b>k</b> | or<br>from<br>Cyoto | No mis<br>been ide | _        |          | ategory                 | accour           | nting fo                 | r 7 per o                   | cent o   | of more l      | nas      |

- <sup>a</sup> CRF tables are contained in annex II to decision 24/CP.19.
- <sup>b</sup> Additional information can be any information submitted by a Party in conjunction with the NIR or CRF tables.
- <sup>c</sup> Parties included in Annex I to the Convention undergoing the process of transition to a market economy may use a base year or a period of years other than 1990, in accordance with the provisions of Article 4, paragraph 6, of the Convention and decisions 9/CP.2 and 11/CP.4.
- $^d$  A Party may select 1995 as the base year for HFC, PFC and SF<sub>6</sub> gases in accordance with Article 3, paragraph 8, of the Kyoto Protocol.
- $^{e}$  A Party may select 1995 or 2000 as the base year for NF<sub>3</sub> in accordance with Article 3, paragraph 8 bis of the Doha Amendment.
  - f "UNFCCC reporting guidelines on annual inventories for Parties included in Annex I to the Convention" (decision 24/CP.19).
  - <sup>g</sup> In accordance with decision 15/CMP.1, para. 3(b), in conjunction with decision 3/CMP.11.

| S                                      | UBMISSION OF SUPPLEMENTARY INFO                                     | ORMATION UNDE   | ER ARTICLE 7, PARA   | GRAPH 1, OF THE KYOTO PROTOCOL  |
|--|---|-----------------|----------------------|---|
|  |   | Date of receipt | Date of resubmission | Comments  |
|  | KP-LULUCF information <sup>a</sup>                                  | 12 April 2017   |                      | NIR chapter 11  |
| ormation                               | KP-LULUCF CRF tables <sup>b</sup>                                   | 13 April 2017   |                      | KP-LULUCF CRF 1990–2015 tables provided for years   |
| entary inf                             | Information on Kyoto units (ERUs, CERs, RMUs and AAUs) <sup>c</sup> | 12 April 2017   |                      | NIR chapter 12  |
| Reporting of supplementary information | SEF tables <sup>d</sup> with Kyoto Protocol units                   | 25 April 2017   |                      | Reported year: 2016<br>SEF table for CP1 (reported year 2016)<br>submitted on 13 April 2017 |
| Report                                 | Changes in national system <sup>e</sup>                             | 12 April 2017   |                      | NIR chapter 13  |
|  | Changes in national registry <sup>e</sup>                           | 12 April 2017   |                      | NIR chapter 14  |
|  | Minimization of adverse impacts <sup>e</sup>                        | 12 April 2017   |                      | NIR chapter 15  |

<sup>&</sup>lt;sup>a</sup> Parties are required to include in their annual submission information on anthropogenic GHG emissions by sources and removals by sinks from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol, and, if any, elected activities under Article 3, paragraph 4, in accordance with decision 2/CMP.8, annex II, paragraphs 1–5.

<sup>&</sup>lt;sup>b</sup> Parties are required to report anthropogenic GHG emissions by sources and removals by sinks from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol, forest management and, if any, elected activities under Article 3, paragraph 4. Parties may also elect to report these tables for the base year or 1990.

<sup>&</sup>lt;sup>c</sup> Parties are required to include in their annual submission information on ERUs, CERs, tCERs, ICERs, AAUs and RMUs, in accordance with decision 15/CMP.1, annex, chapter I.E, in conjunction with annex II to decision 3/CMP.11,.

<sup>&</sup>lt;sup>d</sup> SEF tables for reporting Kyoto Protocol units, as required by annex II to decision 3/CMP.11.

<sup>&</sup>lt;sup>e</sup> The requirements for Parties to report on changes in national systems in accordance with Article 5, paragraph 1, of the Kyoto Protocol, changes in national registries, and the minimization of adverse impacts in accordance with Article 3, paragraph 14, of the Kyoto Protocol, are set out in decision 15/CMP.1, annex, chapters I.F, I.G and I.H respectively, in conjunction with annex II to decision 3/CMP.11.

| T                         | Energy |          | IPPU      |          | Agricult | ure      | LULUC  | `F       | KP-LULUCF <sup>a</sup>  |          | Waste |          |
|---------------------------|--------|----------|-----------|----------|----------|----------|--------|----------|-------------------------|----------|-------|----------|
| Sectoral report tables    | 1      | <b>√</b> | 2(I)      | ✓        | 3        | <i>√</i> | 4      | ✓        | NIR-1                   | ✓        | 5     | <b>√</b> |
| tables                    |        |          | 2(II)     | <b>✓</b> |          |          |        |          |                         |          |       |          |
| Sectoral                  | 1.A(a) | ✓        | 2(I).A-H  | <b>~</b> | 3.A      | ✓        | 4.1    | ✓        | NIR-2                   | ✓        | 5.A   | <b>✓</b> |
| background<br>data tables | 1.A(b) | <b>√</b> | 2(II).B-H | <b>✓</b> | 3.B(a)   | <b>✓</b> | 4.A    | <b>✓</b> | NIR-3                   | <b>✓</b> | 5.B   | <b>✓</b> |
|                           | 1.A(c) | <b>√</b> |           | <b>.</b> | 3.B(b)   | <b>✓</b> | 4.B    | <b>√</b> | 4(KP)<br>Recalculations |          | 5.C   | <b>√</b> |
|                           | 1.A(d) | <b>√</b> |           |          | 3.C      | <b>✓</b> | 4.C    | <b>✓</b> | 4(KP)                   | <b>✓</b> | 5.D   | <b>√</b> |
|                           | 1.B.1  | <b>√</b> |           |          | 3.D      | <b>✓</b> | 4.D    | <b>√</b> | 4(KP-I)A.1              | <b>~</b> |       |          |
|                           | 1.B.2  | ✓        |           |          | 3.E      | <b>✓</b> | 4.E    | <b>√</b> | 4(KP-I)A.1.1            | <b>✓</b> |       |          |
|                           | 1.C    | ✓        |           |          | 3.F      | ✓        | 4.F    | <b>√</b> | 4(KP-I)A.2              | <b>√</b> |       |          |
|                           | 1.D    | ✓        |           |          | 3.G-I    | <b>√</b> | 4(I)   | <b>√</b> | 4(KP-I)A.2.1            | <b>√</b> |       |          |
|                           |        |          | _         |          |          |          | 4(II)  | <b>√</b> | 4(KP-I)B.1              | ✓        |       |          |
| Iables                    |        |          |           |          |          |          | 4(III) | <b>✓</b> | 4(KP-I)B.1.1            | <b>√</b> |       |          |
|                           |        |          |           |          |          |          | 4(IV)  | <b>✓</b> | 4(KP-I)B.1.2            | <b>√</b> |       |          |
|                           |        |          |           |          |          |          | 4(V)   | <b>√</b> | 4(KP-I)B.1.3            | <b>✓</b> |       |          |
|                           |        |          |           |          |          |          |        | <u> </u> | 4(KP-I)B.2              | ✓        |       |          |
|                           |        |          |           |          |          |          |        |          | 4(KP-I)B.3              | <b>√</b> |       |          |
|                           |        |          |           |          |          |          |        |          | 4(KP-I)B.4              | <b>~</b> |       |          |
|                           |        |          |           |          |          |          |        |          | 4(KP-I)B.5              | <b>√</b> |       |          |
|                           |        |          |           |          |          |          |        |          | 4(KP-I)C                | <b>✓</b> |       |          |
|                           |        |          |           |          |          |          |        |          | 4(KP-II)1               | <b>✓</b> |       |          |

|                        |   |   |  |              |                     | PAR                | RT I  |                   |       |                |                          |          |                   |                     |
|------------------------|---|---|--|--------------|---------------------|--------------------|-------|-------------------|-------|----------------|--------------------------|----------|-------------------|---------------------|
|                        | Provis  | sion of ir  | formation  | for the late | est report          | ed inventory       | yea   | r in the com      | mon   | reporting      | format: 20               | )15 (c   | continued)        |                     |
|                        |   |   |  |              |                     |                    |       |                   |       | 4(KP-          | II)3                     | <b>√</b> |                   |                     |
|                        |   |   |  |              |                     |                    |       |                   |       | 4(KP-          | II)4                     | <b>V</b> |                   |                     |
|                        |   |   |  |              |                     |                    |       |                   |       | Accou<br>table | nting                    | <b>√</b> |                   |                     |
|                        | Summary<br>tables   | Summai<br>1.A   | ry table   | ✓            | Summary             | table 2            |       | <b>√</b>          |       | Summ           | ary table 3              |          | 1                 | /                   |
|                        | Other tables  | Table 6<br>(Indirece<br>emissio<br>N <sub>2</sub> O and | t<br>ns of   | <b>√</b>     | Table 7 (           | Key categorie      | es)   | <b>√</b>          |       | Table          | 8 (Recalcul              | ation)   | )                 |                     |
|                        |   | Table 9<br>(Comple                                      | eteness)   | ✓            | Table 10<br>trends) | (Emission          |       | <b>√</b>          |       |                |                          |          |                   |                     |
|                        | Comments  |   | egories are i  | •            |                     | ith difference     | es co | mpared to Cl      | RF Ta | able 7 that    | may lead to              | inco     | onsistency, e.g   | . in the level of   |
| Totals                 | Provided for  | gases   | CO₂ ✓  | CH4 1        | / i                 | N <sub>2</sub> O ✓ | HI    | FCs ✓             | PFC   | 's 🗸           | MIX 🗸                    |          | SF <sub>6</sub> ✓ | $NF_3$ $\checkmark$ |
| T                      | Provided for  | years   | 1990–201   | 5 1990-      | -2015               | 1990–2015          | 19    | 990–2015          | 199   | 0–2015         | 1990–201                 | 5        | 1990–2015         | 1990–2015           |
| <i>CO</i> <sup>2</sup> | Comparison<br>CO <sub>2</sub> emission<br>from fuel<br>combustion |   | Reference<br>✓   | approach     | Sectoral ✓          |                    | 00    | erence more<br>2% |       |                | ce is more<br>ble 1.A(c) | than     | 2% explanat       | ion provided        |
| HFCs and<br>PFCs       | Disaggregat<br>species  | ion by  | HFCs<br>✓  |              | I.                  | PFCs ✓             |       |                   |       |                |                          |          |                   |                     |
| Notation keys          | Used in   |   | Summary table 1.A Sectoral report tables Sectoral backgrou |              |                     |                    |       |                   |       | kground        | ~                        |          |                   |                     |

<sup>&</sup>lt;sup>a</sup> Parties are required to report anthropogenic GHG emissions by sources and removals by sinks from LULUCF activities under Article 3, paragraph 3, of the Kyoto Protocol, and, if any, elected activities under Article 3, paragraph 4, using the agreed CRF tables adopted under decision 6/CMP.9.

No numerical data are reported in this table for the year 1990. For this year the notation key NO is used.

Table 2(II).B–H

| 1 | Ŋ                     |
|---|-----------------------|
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| i | $\stackrel{\cdot}{=}$ |
| 1 | ñ                     |
| 1 | ij                    |
|   |                       |

|             |       |                      |                           |          |          |          |          |          |          | Pro      | visio    | n of     | com      | mon :    | repoi    | ting     |      | ART II nat tables for years reported (continued)  |
|-------------|-------|----------------------|---------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------|---|
|             |       |                      |                           |          |          |          |          |          | Ye       | ears     |          |          |          |          | •        |          |      |   |
|             |       |                      | Base<br>year <sup>a</sup> | 0661     | 1995     | 2000     | 2005     | 2006     | 2007     | 2008     | 2009     | 2010     | 2011     | 2012     | 2013     | 2014     | 2015 | Comments  |
|             | Secto | oral report: Table 3 | ✓                         | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓    |   |
|             |       | Table 3.A            | ✓                         | ✓        | <b>√</b> | <b>√</b> | <b>√</b> | <b>√</b> | ✓        | ✓        | ✓        | ✓        | <b>√</b> | <b>√</b> | <b>√</b> | ✓        | ✓    |   |
|             |       | Table 3.B(a)         | <b>√</b>                  | <b>√</b> | <b>√</b> | <b>✓</b> | <b>√</b> | <b>~</b> | <b>√</b> | ✓        | ✓        | <b>√</b> | <b>√</b> | <b>✓</b> | <b>√</b> | <b>~</b> | ✓    |   |
|             |       | Table 3.B(b)         | ✓                         | <b>√</b> | <b>√</b> | ✓        | <b>√</b> | <b>V</b> | <b>~</b> | <b>√</b> | ✓        | ✓        | <b>✓</b> | <b>✓</b> | <b>V</b> | <b>√</b> | ✓    |   |
| Agriculture |       | Table 3.C            | ✓                         | <b>√</b> | <b>✓</b> | <b>√</b> | <b>√</b> | <b>~</b> | ✓        | ✓        | <b>√</b> | <b>√</b> | <b>V</b> | <b>✓</b> | <b>~</b> | <b>√</b> | ✓    | No numerical data are reported in this table for the years 1990–2015. For these years the notation key NO is used.          |
| Agri        | SBDT  | Table 3.D            | <b>√</b>                  | ✓        | <b>√</b> | <b>√</b> | <b>√</b> | <b>√</b> | ✓        | ✓        | ✓        | ✓        | <b>√</b> | <b>√</b> | <b>√</b> | <b>✓</b> | ✓    |   |
|             |       | Table 3.E            | <b>√</b>                  | <b>√</b> | <b>√</b> | ✓        | <b>✓</b> | <b>√</b> | ✓        | <b>✓</b> | <b>√</b> | ✓        | <b>~</b> | ~        | ✓        | ✓        | ✓    | No numerical data are reported in this table for the years 1990–2015. For these years the notation key NO is used.          |
|             |       | Table 3.F            | ✓                         | <b>√</b> | <b>V</b> | <b>√</b> | <b>~</b> | ~        | ✓        | ✓        | ✓        | <b>√</b> | <b>√</b> | <b>√</b> | <b>√</b> | <b>~</b> |      | No numerical data are reported in this table for the years 1990–2015. For these years the notation keys NA and NO are used. |
|             |       | Table 3.G-I          | <b>√</b>                  | ✓        | <b>V</b> | ✓        | <b>√</b> | <b>V</b> | <b>✓</b> | ✓        | ✓        | ✓        | ✓        | <b>√</b> | <b>V</b> | ✓        | ✓    |   |

|        |      |                      |                           |          |          |          |          |          |          |          |          |          |          |          |          |          |          | ART II  |
|--------|------|----------------------|---------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|---|
|        |      |                      | 1                         |          |          |          |          |          |          | Pro      | visio    | n of     | com      | mon      | repo     | rting    | for      | mat tables for years reported (continued)   |
|        |      |                      |                           |          |          |          |          |          | Ye       | ears     |          |          |          |          |          |          |          |   |
|        |      |                      | Base<br>year <sup>a</sup> | 0661     | 1995     | 2000     | 2005     | 2006     | 2007     | 2008     | 5005     | 2010     | 2011     | 2012     | 2013     | 2014     | 2015     | Comments  |
|        | Sect | oral report: Table 4 | <b>√</b>                  | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | <b>√</b> | ✓        | ✓        |   |
|        |      | Table 4.1            | <b>√</b>                  | <b>√</b> | ✓        | <b>√</b> | <b>√</b> | <b>V</b> | <b>V</b> | <b>√</b> | <b>√</b> | <b>√</b> | <b>√</b> | ✓        | <b>√</b> | <b>√</b> | <b>√</b> |   |
|        |      | Table 4.A            | <b>✓</b>                  | <b>√</b> | ✓        | <b>✓</b> | <b>√</b> | <b>√</b> | <b>√</b> | ✓        | <b>√</b> | <b>√</b> | <b>√</b> | ✓        | <b>√</b> | <b>√</b> | <b>√</b> |   |
|        |      | Table 4.B            | <b>√</b>                  | <b>√</b> | ✓        | <b>√</b> | <b>√</b> | <b>V</b> | <b>V</b> | <b>√</b> | ✓        | <b>√</b> | <b>✓</b> | ✓        | <b>√</b> | <b>√</b> | <b>√</b> |   |
|        | SBDT | Table 4.C            | <b>√</b>                  | <b>√</b> | ✓        | <b>√</b> | <b>✓</b> | ✓        | <b>√</b> | <b>✓</b> | <b>√</b> |   |
|        |      | Table 4.D            | <b>✓</b>                  | <b>✓</b> | ✓        | <b>~</b> | <b>~</b> | <b>✓</b> | <b>✓</b> | ✓        | <b>√</b> | <b>✓</b> | <b>✓</b> | <b>√</b> | <b>V</b> | <b>✓</b> | <b>√</b> |   |
|        |      | Table 4.E            | <b>√</b>                  | <b>V</b> | <b>√</b> | <b>✓</b> | <b>✓</b> | <b>~</b> | <b>~</b> | <b>√</b> | <b>√</b> | <b>✓</b> | <b>✓</b> | <b>✓</b> | <b>✓</b> | <b>√</b> | <b>√</b> |   |
| CF     |      | Table 4.F            | <b>√</b>                  | <b>V</b> | ✓        | <b>V</b> | <b>V</b> | <b>V</b> | <b>V</b> | <b>√</b> | <b>√</b> | <b>✓</b> | <b>✓</b> | ✓        | <b>V</b> | <b>✓</b> | <b>√</b> |   |
| LULUCF |      | Table 4.G            | <b>√</b>                  | <b>√</b> | <b>√</b> | ✓        | <b>√</b> | ✓        | ✓        | ✓        | ✓        | ✓        | <b>√</b> | <b>✓</b> | <b>✓</b> | <b>√</b> | ✓        | No numerical data are reported in this table for the years 1990–1991. For these years the notation keys NA and NE are used. |
|        |      | Table 4(I)           | ✓                         | <b>√</b> | <b>√</b> | ✓        | <b>~</b> | <b>√</b> | <b>√</b> | <b>√</b> | ✓        | ✓        | <b>~</b> | <b>✓</b> | <b>✓</b> | <b>√</b> | ✓        | No numerical data are reported in this table for the years 1990–2015. For these years the notation keys NA and NO are used. |
|        |      | Table 4(II)          | <b>✓</b>                  | ✓        | <b>√</b> | <b>✓</b> | <b>✓</b> | <b>√</b> | <b>√</b> | ✓        | <b>√</b> | <b>✓</b> | <b>✓</b> | <b>✓</b> | <b>✓</b> | <b>√</b> | <b>√</b> |   |
|        |      | Table 4(III)         | <b>√</b>                  | ✓        | <b>V</b> | ✓        | <b>~</b> | ✓        | ✓        | ✓        | ✓        | <b>~</b> | <b>√</b> | <b>✓</b> | <b>✓</b> | <b>√</b> | <b>√</b> | No numerical data are reported in this table for the years 1990–1999. For these years the notation keys NE and NO are used. |
|        |      | Table 4(IV)          | <b>√</b>                  | ✓        | <b>√</b> | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | <b>√</b> | ✓        | ✓        | <b>√</b> | ✓        | No numerical data are reported in this table for the years 1990–2000. For these years the notation key NO is used.          |
|        |      | Table 4(V)           | ✓                         | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        |   |

|           |                 |                    |                                      |                           |          |          |          | PART II   |
|-----------|-----------------|--------------------|--------------------------------------|---------------------------|----------|----------|----------|---|
|           |                 |                    |                                      | •                         |          |          |          | Provision of common reporting format tables for years reported (continued)  |
|           |                 |                    |                                      |                           | Year     | rs       |          |   |
|           |                 |                    |                                      | Base<br>year <sup>a</sup> | 2013     | 2014     | 2015     | Comments  |
|           | Sector<br>repor |                    | Table<br>NIR-1                       | ✓                         | ✓        | <b>√</b> | <b>√</b> | No numerical data are reported in this table for the year 1990. For this year the notation key NA is used.  |
|           |                 |                    | Table<br>NIR-2                       | ✓                         | ✓        | <b>√</b> | <b>√</b> | No numerical data are reported in this table for the year 1990. For this year the notation key NA is used.  |
|           |                 |                    | Table<br>NIR-3                       | ✓                         | ✓        | <b>√</b> | <b>√</b> |   |
|           |                 |                    | Table<br>4(KP)<br>Recalculat<br>ions |                           | ✓        | ✓        |          |   |
| UCF       |                 |                    | Table<br>4(KP)                       | ✓                         | ✓        | <b>~</b> | <b>√</b> | No numerical data are reported in this table for the year 1990. For this year the notation keys NA and NO are used.   |
| KP-LULUCF |                 | Table 4            | (KP-I)A.1                            | ✓                         | ✓        | ✓        | ✓        | No numerical data are reported in this table for the year 1990. For this year the notation key NA is used.  |
| KF        |                 | Table<br>4(KP-I)   | A.1.1                                | <b>√</b>                  | ✓        | ✓        | ✓        | No numerical data are reported in this table for the years 1990, 2013–2015. For the years 1990 the notation key NA is used. For the years 2013–2015 the notation keys NA and NO are used. |
|           |                 | Table 4            | (KP-I)A.2                            | <b>√</b>                  | ✓        | ✓        | ✓        | No numerical data are reported in this table for the years 1990. For this year the notation key NA is used.   |
|           | $\sim$          | Table 4<br>I)A.2.1 | (KP-                                 | ✓                         | ✓        | <b>V</b> | <b>√</b> | No numerical data are reported in this table for the years 1990, 2013–2015. For these years the notation key NA is used.  |
|           |                 | Table 4            | (KP-I)B.1                            | ✓                         | <b>√</b> | <b>√</b> | <b>√</b> | No numerical data are reported in this table for the year 1990. For this year the notation key NA is used.  |
|           |                 | Table 4<br>I)B.1.1 | (KP-                                 | <b>√</b>                  | ✓        | <b>√</b> | <b>√</b> | No numerical data are reported in this table for the year 1990. For this year the notation key NA is used.  |
|           |                 | Table 4<br>I)B.1.2 | •                                    | ✓                         | ✓        | <b>√</b> | <b>√</b> | No numerical data are reported in this table for the years 1990, 2013–2015. For these years the notation key NA is used.  |

|                        |                           |          |          |          | PART II  Provision of common reporting format tables for years reported (continued)   |  |  |  |  |  |  |  |
|------------------------|---------------------------|----------|----------|----------|---|--|--|--|--|--|--|--|
|                        |                           | Year     | rs       |          |   |  |  |  |  |  |  |  |
|                        | Base<br>year <sup>a</sup> | 2013     | 2014     | 2015     | Comments  |  |  |  |  |  |  |  |
| Table 4(KP-<br>I)B.1.3 | <b>√</b>                  | <b>√</b> | ✓        | <b>√</b> | No numerical data are reported in this table for the year 1990. For this year the notation key NA is used.  |  |  |  |  |  |  |  |
| Table 4(KP-I)B.2       | ✓                         | <b>V</b> | ✓        | <b>√</b> | No numerical data are reported in this table for the years 1990, 2013–2015. For these years the notation key NA is used.  |  |  |  |  |  |  |  |
| Table 4(KP-I)B.3       | able 4(KP-I)B.3           |          |          | <b>√</b> | No numerical data are reported in this table for the years 1990, 2013–2015. For these years the notation key NA is used.  |  |  |  |  |  |  |  |
| Table 4(KP-I)B.4       | <b>✓</b>                  | <b>√</b> | <b>✓</b> | <b>√</b> | No numerical data are reported in this table for the years 1990, 2013–2015. For these years the notation key NA is used.  |  |  |  |  |  |  |  |
| Table 4(KP-I)B.5       | <b>✓</b>                  | <b>√</b> | <b>✓</b> | <b>√</b> | No numerical data are reported in this table for the years 1990, 2013–2015. For these years the notation key NA is used.  |  |  |  |  |  |  |  |
| Table 4(KP-I)C         | <b>✓</b>                  | ✓        | <b>✓</b> | <b>√</b> | No numerical data are reported in this table for the years 1990. For this year the notation key NA is used.   |  |  |  |  |  |  |  |
| Table 4(KP-II)1        | <b>√</b>                  | ✓        | ✓        | <b>√</b> | No numerical data are reported in this table for the years 1990, 2013–2015. For the years 1990 the notation key NA is used. For the years 2013–2015 the notation keys NA and NO are used. |  |  |  |  |  |  |  |
| Table 4(KP-II)2        | <b>✓</b>                  | <b>√</b> | <b>✓</b> | ✓        | No numerical data are reported in this table for the years 1990, 2013–2015. For these years the notation key NA is used.  |  |  |  |  |  |  |  |
| Table 4(KP-II)3        | <b>V</b>                  | <b>✓</b> | <b>√</b> | <b>√</b> | No numerical data are reported in this table for the years 1990, 2013–2015. For these years the notation key NA is used.  |  |  |  |  |  |  |  |
| Table 4(KP-II)4        | <b>√</b>                  | <b>√</b> | <b>√</b> | <b>✓</b> | No numerical data are reported in this table for the year 1990. For this year the notation keys NA and NO are used.   |  |  |  |  |  |  |  |
| Table Accounting       |                           |          |          |          | No numerical data are reported in this table for the year 1990. For this year the notation keys NA and NO are used.   |  |  |  |  |  |  |  |

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|-------|------|-----------------------|---------------------------|------|----------|----------|----------|----------|----------|-------|----------|----------|------|------|----------|------|------|-------|-------------------------------------|
|       |      |                       |                           |      |          |          |          |          | Pro      | visio | n of o   | comr     | non  | repo | rting    | for  | ma   | t tal | bles for years reported (continued) |
|       |      |                       |                           |      |          |          |          |          | Ye       | ears  |          |          |      |      |          |      |      |       |                                     |
|       |      |                       | Base<br>year <sup>a</sup> | 0661 | 1995     | 2000     | 2005     | 2006     | 2007     | 2008  | 5009     | 2010     | 2011 | 2012 | 2013     | 7017 | +107 | 2015  | Comments                            |
|       | Sect | toral report: Table 5 | <b>√</b>                  | ✓    | ✓        | ✓        | ✓        | ✓        | <b>V</b> | ✓     | ✓        | ✓        | ✓    | ✓    | _        | ✓    | ,    | /     |                                     |
|       |      | Table 5.A             | ✓                         | ✓    | <b>√</b> | <b>~</b> | ✓        | <b>~</b> | <b>V</b> | ✓     | <b>~</b> | <b>√</b> | ✓    | ✓    | <b>√</b> | ✓    | ,    | /     |                                     |
| Waste | TC   | Table 5.B             | ✓                         | ✓    | ✓        | <b>✓</b> | ✓        | ✓        | <b>✓</b> | ✓     | ✓        | ✓        | ✓    | ✓    | <b>√</b> | ✓    | ,    | /     |                                     |
|       | SBI  | Table 5.C             | <b>√</b>                  | ✓    | <b>√</b> | <b>√</b> | ✓        | ✓        | <b>V</b> | ✓     | ✓        | ✓        | ✓    | ✓    | <b>√</b> | ✓    | ,    | /     |                                     |
|       |      | Table 5.D             | <b>√</b>                  | ✓    | <b>√</b> | <b>√</b> | <b>√</b> | <b>~</b> | <b>V</b> | ✓     | <b>√</b> | ✓        | ✓    | ✓    | <b>√</b> | ✓    | ,    | /     |                                     |

|                   |   |                           |          |          |          |          | Pı       | rovis    | ion o    | f cor    | nmoi     | n rep    | ortii    |          | PAR<br>rma |          |      | s for years reported (continued) |
|-------------------|---|---------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|----------|------|----------------------------------|
|                   |   |                           |          |          |          |          |          | Y        | ears     |          |          |          |          |          |            |          |      |                                  |
|                   |   | Base<br>year <sup>a</sup> | 0661     | 2661     | 2000     | 2005     | 2006     | 2007     | 2008     | 2009     | 2010     | 2011     | 2012     | 2013     | 7100       | 7014     | 2015 | Comments                         |
|                   | Summary table 1.A (Report<br>for national GHG<br>inventories) | ✓                         | ✓        | ✓        | ✓        | ✓        | ✓        | ,        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓          | ~        |      |                                  |
|                   | Summary table 2 (CO <sub>2</sub> equivalent emissions)        | <b>√</b>                  | <b>√</b> | <b>√</b> | <b>√</b> | <b>~</b> | ✓        | ✓        | ✓        | <b>√</b> | <b>~</b> | <b>√</b> | ✓        | <b>√</b> | <b>V</b>   | ~        | /    |                                  |
| tables            | Summary table 3 (Methods/emission factors)                    | <b>√</b>                  | <b>√</b> | <b>√</b> | <b>√</b> | <b>√</b> | <b>✓</b> | <b>√</b> | ✓        | ✓        | <b>√</b> | <b>~</b> | <b>√</b> | ✓        | ✓          | ~        | /    |                                  |
| Summary and other | Table 6 (Indirect emissions of $N_2O$ and $CO_2$ )            | <b>√</b>                  | ✓        | <b>√</b> | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | ✓        | <b>√</b> | <b>√</b>   | ~        |      |                                  |
| Sum               | Table 7 (Key categories)                                      | <b>√</b>                  | <b>√</b> | <b>V</b> | <b>√</b> | <b>✓</b> | ✓        | ✓        | <b>√</b> | <b>✓</b> | <b>√</b> | <b>√</b> | <b>√</b> | <b>√</b> | <b>√</b>   | ~        | /    |                                  |
|                   | Table 8 (Recalculation – recalculated data)                   | <b>√</b>                  | <b>√</b> | <b>√</b> | <b>~</b> | <b>~</b> | ✓        | ✓        | ✓        | <b>√</b> | <b>~</b> | <b>√</b> | <b>√</b> | <b>√</b> | <b>√</b>   |          |      |                                  |
|                   | Table 9 (Completeness)  | ✓                         | <b>~</b> | <b>~</b> | ✓        | <b>√</b> | <b>√</b> | <b>√</b> | <b>√</b> | ✓        | ✓        | <b>√</b> | ✓        | ✓        | ✓          | <b>~</b> | /    |                                  |
|                   | Table 10 (Trends)   | ✓                         | <b>√</b> | <b>√</b> | <b>√</b> | <b>√</b> | ✓        | ✓        | ✓        | ✓        | <b>√</b> | ✓        | ✓        | <b>√</b> | ✓          | ~        | /    |                                  |

<sup>&</sup>lt;sup>a</sup> Parties included in Annex I to the Convention undergoing the process of transition to a market economy may use a base year or a period of years other than 1990, in accordance with the provisions of Article 4, paragraph 6, of the Convention and decision 24/CP.19.

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| PART III  |   |                        |               |             |                   |          |           |  |
|---|---|------------------------|---------------|-------------|-------------------|----------|-----------|--|
| Provision of information relating to recalculations |   |                        |               |             |                   |          |           |  |
| Table 8 (Recalculated data)                         | culated data) Comments Explanatory information relating to recalculations is provided in chapter 10 of the NIR. |                        |               |             |                   |          |           |  |
| Recalculation reported for years                    | lculation reported for years 1990–2014  |                        |               |             |                   |          |           |  |
| Recalculated sectors/gases                          | Energy  |                        | U             | Agriculture | LULUCF            | Waste    | KP-LULUCF |  |
| $CO_2$  | ✓   | <b>✓</b>               |               | ✓           | ✓                 | <b>√</b> | ✓         |  |
| CH <sub>4</sub>                                     | ✓   |                        |               | <b>√</b>    | <b>√</b>          | <b>✓</b> | ✓         |  |
| $N_2O$  | <b>√</b>  |                        |               | <b>✓</b>    | <b>√</b>          | <b>√</b> | ✓         |  |
| HFCs  |   | ✓                      |               |             |                   |          |           |  |
| PFCs  |   |                        |               |             |                   |          |           |  |
| Unspecified mix of HFCs and PFCs                    |   |                        |               |             |                   |          |           |  |
| $SF_6$  |   |                        |               |             |                   |          |           |  |
| NF <sub>3</sub>                                     |   |                        |               |             |                   |          |           |  |
| Percentage difference in                            | Base–year estimate: <sup>a</sup>  | Incl                   | uding LULUCF: | 21.45%      | Excluding LULUCF: | 1.09%    |           |  |
| aggregate GHG emissions                             | Latest recalculated ye  | ear: <sup>b</sup> Incl | uding LULUCF: | -5.65%      | Excluding LULUCF: | 0.1%     |           |  |

 <sup>&</sup>lt;sup>a</sup> Parties included in Annex I to the Convention undergoing the process of transition to a market economy are allowed to use a base year or a period of years other than 1990, in accordance with the provisions of Article 4, paragraph 6, of the Convention and decision 24/CP.19.
 <sup>b</sup> The latest recalculated year is the submission year minus three years.

|  | PART IV   |   |   |  |  |  |
|--|---|---|---|--|--|--|
|  | Provision of information relating to KP-LULUCF activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol    Provided   Observation  |   |   |  |  |  |
|  | Emissions by sources and removals by sinks are clearly distinguished from emissions from categories included in Annex A to the Kyoto Protocol   |   |   |  |  |  |
|  | Information on how inventory methodologies have been applied taking into account the 2006 IPCC Guidelines for National Greenhouse Gas Inventories and any relevant supplementary guidance recognizing the principles laid out in decision 16/CMP.1.   |   |   |  |  |  |
| -5   | Information on the geographical location of the boundaries of areas that encompass:   |   |   |  |  |  |
| aphs I   |   | Units of land subject to activities under Article 3, paragraph 3  | ✓ |  |  |  |
| II, paragr   |   | Units of land subject to activities under Article 3, paragraph 3, which would otherwise be included in land subject to forest management or elected activities under Article 3, paragraph 4 | ✓ |  |  |  |
| annex  |   | Land subject to forest management or elected activities under Article 3, paragraph 4  | ✓ |  |  |  |
| 2/CMP.8,   | Information on the spatial assessment unit for determining the area of accounting for afforestation, reforestation and deforestation  |   |   |  |  |  |
| Reporting requirements under decision 2/CMP.8, annex II, paragraphs 1– | Information on GHG emissions/removals resulting from activities under Article 3, paragraph 3, and Article 3, paragraph 4, for all geographical locations reported in the current and previous years since the beginning of the commitment period or the onset of the activity, whichever comes later. |   |   |  |  |  |
|  | Information on carbon pools (above-ground/below-ground biomass, litter, dead wood and soil organic carbon) that are not accounted for.  |   |   |  |  |  |
| orting require   | When a Party applies the provisions for natural disturbances, information demonstrating that these emissions in any single year exceed the background level(s), including a margin, where needed. For this purpose the Party shall include information showing:                                       |   |   |  |  |  |
| Rep  |   | That all lands subject to exclusion due to natural disturbances are identified  | ✓ | In chapter 11.5.2.4 the Party reports it will not apply the provisions for natural disturbances for the years 2013-2015. |  |  |
|  |   | How annual emissions resulting from natural disturbances and the subsequent removals are estimated and excluded from accounting   | ✓ | In chapter 11.5.2.4 the Party reports it will not apply the provisions for natural disturbances for the years 2013-2015. |  |  |
|  |   | That no land-use change has occurred on lands for which the provisions in decision 2/CMP.7, annex, paragraph 33, are applied  | ✓ | In chapter 11.5.2.4 the Party reports it will not apply the provisions for natural disturbances for the years 2013-2015. |  |  |

|  | PART IV  |          |  |
|--|--|----------|--|
| Provision of information relating to KP-LULUCF activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol (continued) |  |          |  |
|  |  | Provided | Observation  |
|  | That events and circumstances were beyond the control of the Party   | <b>✓</b> | In chapter 11.5.2.4 the Party reports it will not apply the provisions for natural disturbances for the years 2013-2 |
|  | The efforts taken to rehabilitate the land for which the provisions contained in decision 2/CMP.7, annex, paragraph 33, are applied  | ✓        | In chapter 11.5.2.4 the Party reports it will not apply the provisions for natural disturbances for the years 2013-2 |
|  | That emissions associated with salvage logging were not excluded from accounting   | ✓        | In chapter 11.5.2.4 the Party reports it will not apply the provisions for natural disturbances for the years 2013-2 |
|  | accounted for by instantaneous oxidation, information on GHG emissions/removals resulting from as in the HWP pool accounted for in accordance with decision 2/CMP.7, including:                                |          |  |
|  | Activity data for the HWP categories used for estimating the pool removed from domestic forests, for domestic consumption and for export   | ✓        |  |
|  | Half-lives used in estimating emissions/removals for the HWP categories used   | <b>✓</b> |  |
|  | Whether emissions from HWP originating from forests prior to the start of the second commitment period have been included in the accounting, if the forest management reference level is based on a projection | <b>✓</b> |  |
|  | How emissions from the HWP pool accounted for in the first commitment period on the basis of instantaneous oxidation have been excluded from the accounting for the second commitment period                   | <b>√</b> |  |
|  | How the HWP resulting from deforestation have been accounted on the basis of instantaneous oxidation   | ✓        |  |
|  | How CO2 emissions from HWP in SWDS and from wood harvested for energy purposes have been accounted on the basis of instantaneous oxidation   | ✓        |  |
|  | How emissions/removals from changes in the HWP pool accounted for do not include imported HWP  | <b>√</b> |  |
|  | nation on anthropogenic GHGs from LULUCF activities under Article 3, paragraph 3, and Article agraph 4, factoring out removals from:   |          |  |
|  | Elevated CO <sub>2</sub> concentrations above pre-industrial levels  | ✓        |  |

| PART IV  |  |          |   |  |  |
|--|--|----------|---|--|--|
| Provision of information relating to KP-LULUCF activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol (continued) |  |          |   |  |  |
|  |  | Provided | Observation   |  |  |
|  | Indirect nitrogen deposition   | ✓        |   |  |  |
|  | The dynamic effects of age structure resulting from activities prior to 1 January 1990   | ✓        |   |  |  |
| Specific   | information to be reported for activities under Article 3, paragraph. 3:   |          |   |  |  |
|  | Activities under Article 3, paragraph 3, that began on or after 1 January 1990 and before 31 December of the last year of the commitment period, and are directly human-induced  | ✓        |   |  |  |
|  | How harvesting or forest disturbance that is followed by the re-establishment of forest is distinguished from deforestation  | ✓        |   |  |  |
| Specific   | information to be reported for activities under Article 3, paragraph 4:  |          |   |  |  |
|  | Activities under Article 3.4 that occurred since 1 January 1990 and are human induced  | ✓        |   |  |  |
|  | Cropland management, grazing land management, revegetation, wetland drainage and rewetting: emissions/removals reported for each year of the commitment period and for the base year for each of the elected activities on the geographical locations reported | <b>✓</b> | The Party does not elect cropland management, grazing land management, revegetation or wetland drainage and rewetting |  |  |
|  | Emissions/removals from activities under Article 3, paragraph 4, are not accounted for under activities under Article 3, paragraph 3   | <b>√</b> |   |  |  |
|  | Information on how emissions arising from the conversion of natural forests to planted forests are accounted for   | <b>√</b> |   |  |  |
|  | Methodological consistency between the reference level and reporting for forest management   | <b>✓</b> |   |  |  |
|  | Technical corrections made pursuant to decision 2/CMP.7, annex, paragraph 14   | ✓        |   |  |  |
|  | Forest management: if emissions/removals from the harvest and conversion of forest plantations to non-forest land were included, information how requirements set out in decision 2/CMP.7, annex, paragraphs 37–39 were met, including:                        |          |   |  |  |
|  | The identification of all lands and associated carbon pools subject to decision 2/CMP.7, annex, paragraph 37, including the georeferenced location and year of conversion  | ✓        | In chapter 11.1 of the NIR the Party reports it will not use the provision of carbon equivalent forests.              |  |  |

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|   | PART IV  |          |  |  |  |  |
|---|--|----------|--|--|--|--|
|   | Provision of information relating to KP-LULUCF activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol (continued)   |          |  |  |  |  |
|   |  | Provided | Observation  |  |  |  |
| П | A demonstration that the forest plantation was first established through direct human-induced planting and/or seeding of non-forest land before 1 January 1990, and, if the forest plantation was re-established, that this last occurred on forest land through direct human-induced planting and/or seeding after 1 January 1960 | <b>√</b> | In chapter 11.1 of the NIR the Party reports it will not use the provision of carbon equivalent forests. |  |  |  |
|   | A demonstration that a new forest of at least equivalent area to the harvested forest plantation is established through direct human-induced planting and/or seeding of nonforested land that did not contain forest on 31 December 1989   | <b>✓</b> | In chapter 11.1 of the NIR the Party reports it will not use the provision of carbon equivalent forests. |  |  |  |
|   | A demonstration that this newly established forest will reach at least the equivalent carbon stock that was contained in the harvested forest plantation at the time of harvest, within the normal harvesting cycle of the harvested forest plantation, and, if not, a debit would be generated under Article 3, paragraph 4       |          | In chapter 11.1 of the NIR the Party reports it will not use the provision of carbon equivalent forests. |  |  |  |