

**COMPLIANCE COMMITTEE** 



### Status report of the annual inventory of Ukraine

Note by the secretariat

The status report of the annual inventory of Ukraine was published on 21 July 2016. 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/2016/UKR, 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.



United Nations

Framework Convention on Climate Change

Distr.: General 21 July 2016

English only

## Status report of the annual inventory of Ukraine

1. This status report was prepared by the secretariat pursuant to decision 22/CMP.1 in conjunction with 4/CMP.11, as part of the initial check of Ukraine's annual inventory, submitted in accordance with decisions 24/CP.19, 15/CMP.1 in conjunction with 3/CMP.11 and 2/CMP.8. It reflects the content of the inventory submission of 2016 as originally submitted by the Party.

2. In this report, the following abbreviations are used:

CRF: common reporting format GHG: greenhouse gas HWP: harvested wood products KP-LULUCF: Article 3, paragraphs 3 and 4, activities under the Kyoto Protocol LULUCF: land use, land-use change and forestry 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

CO2: carbon dioxide CH4: methane N2O: nitrous oxide HFCs: hydrofluorocarbons PFCs: perfluorocarbons MIX: Unspecified mix of HFCs and PFCs SF6: sulphur hexafluoride NF3: nitrogen trifluoride NOX: nitrogen oxides CO: carbon monoxide NMVOCs: non-methane volatile organic compounds SO2: 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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#### FCCC/ASR/2016/UKR

|              |  |                     | GRI             | EENHO       | OUSE GAS              | S INVEN  | FORY S | SUBMI  | ISSION         |                 |                 |          |            |        |
|--------------|--|---------------------|-----------------|-------------|-----------------------|--|--------|--------|----------------|-----------------|-----------------|----------|------------|--------|
|              |  | Date of re          | eceipt          | 1           | Date of res           | ubmission  |        | Comm   | ents           |                 |                 |          |            |        |
|              | NIR  | 24 May              | 2016            |             | 18 July 2             | 016  |        |        |                |                 |                 |          |            |        |
|              | CRF tables <sup>a</sup>  | 24 May              | 2016            |             |                       |  |        |        |                |                 |                 |          |            |        |
| ormation     | Additional information <sup>b</sup>                                      |                     |                 |             |                       |  |        |        |                |                 |                 |          |            |        |
| General infc | CRF provided for years   | 1990-20             | 014             | ·           |                       |  |        |        |                |                 |                 |          |            |        |
| Ge           | Base year or period <sup>c</sup>   | 1990                | В               | ase ye      | ear for H<br>PFCs,    | $\begin{array}{c} \text{FCs,} \\ \text{SF}_6^{\ d} \end{array} \right  19$ | 990    |        |                |                 | Base $NF_3^e$   | year for | : 1990     |        |
|              | Gases covered  | $CO_2$              | $CH_4$          | $N_2O$      | HFCs                  | PFCs   | MIX    | S      | F <sub>6</sub> | NF <sub>3</sub> | NO <sub>X</sub> | СО       | NMVOCs     | $SO_2$ |
|              |  | ~                   | √               | ~           | $\checkmark$          | ~  | ~      | ~      | /              | ✓               | √               | ✓        | √          | ~      |
| NIR          | Description  |                     |                 |             | of the NI<br>guidelin |  | neral, | follow | vs the s       | tructu          | ire out         | lined in | the update | 1      |
| Į.           | Language of NIR  | Engli               | sh              |             |                       |  |        |        |                |                 |                 |          |            |        |
| $RF^{5}$     | Missing source categor<br>cent for categories incl<br>the Kyoto Protocol | y larger<br>uded in | than 7<br>Annex | per<br>A to | 7 per ce              | nt asses   | sment  | not ap | oplicab        | le in 2         | 2016            |          |            |        |

<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.

 $^{c}$  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.

<sup>*d*</sup> A Party may select 1990 or 1995 as the base year for HFC, PFC and  $SF_6$  gases in accordance with Article 3, paragraph 8, of the Kyoto Protocol.

<sup>*e*</sup> A Party may select 1990, 1995 or 2000 as the base year for  $NF_3$  in accordance with Article 3, paragraph 8 bis of the Doha Amendment to the Kyoto Protocol.

<sup>f</sup> "Revision of the UNFCCC reporting guidelines on annual inventories for Parties included in Annex I to the Convention" (decision 24/CP.19).

<sup>g</sup> A Party has not reported an estimate for an Annex A source category that accounted for 7 per cent or more of the Party's aggregate emissions (decision 15/CMP.1, para. 3(b), in conjunction with decision 3/CMP.11).

|                  | SUBMISSION OF S   | UPPLEMENTAR     | Y INFORMATION UNI    | DER ARTICLE 7.1                           |
|------------------|---|-----------------|----------------------|---|
|                  |   | Date of receipt | Date of resubmission | Comments                                  |
| ion              | KP-LULUCF information <sup>a</sup>                                  | 24-May-16       | 18-Jul-2016          | NIR chapter 11                            |
| v information    | KP-LULUCF CRF <sup>b</sup>  | 24-May-16       |                      | KP-LULUCF CRF1990-2014provided for years: |
| of supplementary | Information on Kyoto units (ERUs, CERs, RMUs and AAUs) <sup>c</sup> | 24-May-16       | 18-Jul-2016          | NIR chapter 12                            |
| f supp           | SEF <sup>d</sup> with Kyoto Protocol units                          |                 |                      |   |
| Reporting a      | Change in national system <sup>e</sup>                              | 24-May-16       | 18-Jul-2016          | NIR chapter 13                            |
| Repo             | Change in national registry <sup>e</sup>                            | 24-May-16       | 18-Jul-2016          | NIR chapter 14                            |
|                  | Minimization of adverse impacts <sup>e</sup>                        | 24-May-16       | 18-Jul-2016          | NIR chapter 15                            |

<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 the decision 2/CMP.8, annex II, paragraphs 1–5.

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

<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.

|                                       | Provisio       | n of in | formation for | the late | est reporte | d inven | tory year | in the co | nmon reporting f        | ormat: | 2014  |          |
|---------------------------------------|----------------|---------|---------------|----------|-------------|---------|-----------|-----------|-------------------------|--------|-------|----------|
| 1                                     | Energy         |         | IPPU          |          | Agricult    |         | LULU      |           | KP-LULUCF               |        | Waste |          |
| Sectoral report tables                | 1              | ~       | 2(I)          | ✓        | 3           | ✓       | 4         | ~         | NIR-1                   | ✓      | 5     | <b>v</b> |
|                                       |                |         | 2(II)         | ~        |             |         |           |           |                         |        |       |          |
| Sectoral<br>background<br>data tables | 1.A(a)         | ~       | 2(I).A-H      | ~        | 3.A         | ~       | 4.1       | ~         | NIR-2                   | ~      | 5.A   | <b>v</b> |
|                                       | 1.A(b)         | ~       | 2(II).B-H     | ~        | 3.B(a)      | ~       | 4.A       | ~         | NIR-3                   |        | 5.B   | ✓        |
|                                       | 1.A(c)         | ~       |               |          | 3.B(b)      | ~       | 4.B       | ~         | 4(KP)Recalc<br>ulations | ~      | 5.C   | ✓        |
|                                       | 1.A(d)         | ~       |               |          | 3.C         | ~       | 4.C       | ~         | 4(KP)                   | ~      | 5.D   | ~        |
|                                       | 1. <b>B</b> .1 | ~       |               |          | 3.D         | ~       | 4.D       | ~         | 4(KP-I)A.1              | ~      |       |          |
|                                       | 1.B.2          | ~       |               |          | 3.E         | ~       | 4.E       | ~         | 4(KP-<br>I)A.1.1        | ~      |       |          |
| calon I                               | 1.C            | ~       |               |          | 3.F         | ~       | 4.F       | ~         | 4(KP-I)A.2              | ~      |       |          |
|                                       | 1.D            | ~       |               |          | 3.G-I       | ~       | 4(I)      | ~         | 4(KP-<br>I)A.2.1        |        |       |          |
|                                       |                |         | -             |          |             |         | 4(II)     | ~         | 4(KP-I)B.1              | ~      |       |          |
|                                       |                |         |               |          |             |         | 4(III)    | <b>v</b>  | 4(KP-<br>I)B.1.1        | ~      | _     |          |
|                                       |                |         |               |          |             |         | 4(IV)     | <b>v</b>  | 4(KP-<br>I)B.1.2        |        |       |          |
|                                       |                |         |               |          |             |         | 4(V)      | ✓         | 4(KP-<br>I)B.1.3        | ~      |       |          |
|                                       |                |         |               |          |             |         |           |           | 4(KP-I)B.2              | ~      | _     |          |

|                   |                                    |           |   |                       | 4(KP-I)B.3          | ~           |   |
|-------------------|------------------------------------|-----------|---|-----------------------|---------------------|-------------|---|
|                   |                                    |           |   |                       | 4(KP-I)B.4          | ×           |   |
|                   |                                    |           |   |                       | 4(KP-I)B.5          | ~           |   |
|                   |                                    |           |   |                       | 4(KP-I)C            | ~           |   |
|                   |                                    |           |   |                       | 4(KP-II)1           | ✓           |   |
|                   |                                    |           |   |                       | 4(KP-II)2           | ×           |   |
|                   |                                    |           |   |                       | 4(KP-II)3           | ×           |   |
|                   |                                    |           |   |                       | 4(KP-II)4           | ✓           |   |
|                   |                                    |           |   |                       | Accounting<br>table | ✓           |   |
| Summary<br>tables | Summary 1.A                        | ~         | Summary 2   | ~                     | Summary 3           |             | ✓ |
| Other tables      | Table 6<br>(Indirect<br>emissions) | ~         | Table 7 (Key categories)  | ~                     | Table 8 (Reca       | alculation) |   |
|                   | Table 9<br>(Completeness)          | ~         | Table 10 (Emission<br>Trends)   | <ul> <li>✓</li> </ul> |                     |             |   |
| Comments          | not be undertaken                  | due to an | ne consistency check of key ca<br>issue in the CRF reporter. The<br>we Team prior to the inventor | e check will b        |                     |             |   |

<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.

|                           | Provision of ir              | nformation for | the late | st reporte | PAR<br>ed inventory | RT I<br>year in the con           | nmon reportin       | g format: 2014            | l (continue     | d)        |                |
|---------------------------|------------------------------|----------------|----------|------------|---------------------|-----------------------------------|---------------------|---------------------------|-----------------|-----------|----------------|
| als                       | Provided for gases           | CO2 🗸          | CH₄      | <b>v</b>   | N₂O ✔               | HFCs 🖌                            | PFCs ¥              | Mix                       | ✓ SF            | 6 🖌       | NF3 🗸          |
| Totals                    | Provided for years           | 1990–2014      | 1990     | -2014      | 1990–2014           | 4 1997–2014                       | 4 1990–20           | 010                       | 19<br>201       | 90–<br>14 |                |
| <i>CO</i> <sup>2</sup>    | Comparison of                | Reference ap   | proach   | Sectoral   |                     | Difference mor<br>than 2 per cent |                     | ence is more th           | an 2 per ce     | ent       |                |
| 0                         | $CO_2$ from fuel combustion  | √              |          | ~          |                     |                                   | Explanat            | tion provided             |                 |           |                |
| HFCs, PFCs, $SF_{\delta}$ |                              | HFCs           |          |            | PFCs                |                                   | Unspecij<br>HFCs ar | fied mix of<br>1d PFCs    | SF <sub>6</sub> | N         | F <sub>3</sub> |
| HFCs<br>5                 | Disaggregation by<br>species | ~              |          |            | ~                   |                                   |                     |                           |                 |           |                |
| Notation keys             | Used in                      | Summary tab    | le 1.A   | v          | Sectoral r          | eport tables                      | v                   | Sectoral b<br>data table. | ackground<br>s  | r         | /              |
| $N_G$                     | Comments                     |                |          |            | - <b>I</b>          |                                   | •                   | •                         |                 | I         |                |

|        |      |                 |             |                           |      |      |      |      |      |      | Duc  | inic  | n of |        |      |       |      | RT II<br>format tables for years reported  |
|--------|------|-----------------|-------------|---------------------------|------|------|------|------|------|------|------|-------|------|--------|------|-------|------|--|
|        |      |                 |             | r –                       |      |      |      |      |      | Year |      | VISIO |      | :01111 |      | repor | ung  |  |
|        |      |                 |             | Base<br>year <sup>a</sup> | 0661 | 1995 | 2000 | 2005 | 2006 | 2007 | 2008 | 2009  | 2010 | 2011   | 2012 | 2013  | 2014 | Comments   |
|        | Sect | oral report: ta | able 1      | ~                         | ~    | ~    | ✓    | ✓    | ~    | ~    | ~    | ~     | ~    | ✓      | ~    | ~     | ~    |  |
|        |      | Table 1.A(a)    | )           | ~                         | ~    | ~    | ~    | ~    | ~    | ~    | ~    | ~     | ~    | ~      | ~    | ~     | ~    |  |
|        |      | Table 1.A(b     | )           | ~                         | ~    | ~    | ~    | ~    | ~    | ~    | ~    | ~     | ~    | ~      | ~    | ~     | ~    |  |
|        |      | Table 1.A(c)    | )           | ~                         | ~    | ~    | ~    | ~    | ~    | ~    | ~    | ~     | ~    | ~      | ~    | ~     | ~    |  |
| Energy | E.   | Table 1.A(d     | )           | ~                         | ~    | ~    | ~    | ~    | ~    | ~    | ~    | ~     | ~    | ~      | ~    | ~     | ~    |  |
| En     | SBDT | Table 1.B.1     |             | ~                         | ~    | ~    | ~    | ~    | ~    | ~    | ~    | ~     | ~    | ~      | ~    | ~     | ~    |  |
|        |      | Table 1.B.2     |             | √                         | ~    | ~    | ~    | ~    | ~    | ~    | ~    | ~     | ~    | ~      | ~    | ~     | ~    |  |
|        |      | Table 1.C       |             | ~                         | ~    | ~    | ~    | ~    | ~    | ~    | ~    | ~     | ~    | ~      | ~    | ~     |      | No numerical data are reported in this table for the years 1990–2014. For these years the notation key NA is used. |
|        |      | Table 1.D       |             | ~                         | ~    | ~    | ~    | ~    | ~    | ~    | ~    | ~     | ~    | ~      | ~    | ~     | ~    |  |
|        | Sect |                 | Table 2(I)  | ~                         | ~    | ~    | ✓    | ✓    | √    | ~    | ✓    | √     | ~    | √      | ~    | ~     | √    |  |
| D o    | repo | rts:            | Table 2(II) | ~                         | ~    | ~    | ~    | ~    | ~    | ~    | ~    | ~     | ~    | ~      | ~    | ~     | ~    |  |
| IPPU   | SBDT | Table 2(I).A    | -H          | ~                         | ~    | ~    | ~    | ~    | ~    | ~    | ~    | ~     | ~    | ~      | ~    | ~     | ~    |  |
|        | SBI  | Table 2(II).I   | 3-Н         | ~                         | ✓    | ~    | ✓    | ✓    | ✓    | ✓    | √    | ✓     | ✓    | ~      | √    | ✓     | ✓    |  |

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|             |       |                      |                           |      |      |      |      |      | г    | moni | ion   | ofaa |      |      | nonti |       | PART II<br>rmat tables for years reported (continued)  |
|-------------|-------|----------------------|---------------------------|------|------|------|------|------|------|------|-------|------|------|------|-------|-------|--|
|             |       |                      |                           |      |      |      |      |      | Year |      | 51011 |      |      |      | porti | ig 10 |  |
|             |       |                      | Base<br>year <sup>a</sup> | 1990 | 1995 | 2000 | 2005 | 2006 | 2007 | 2008 | 2009  | 2010 | 2011 | 2012 | 2013  | 2014  | Comments   |
|             | Secto | oral report: Table 3 | ✓                         | ✓    | ~    | ~    | ~    | ~    | ✓    | ~    | ~     | ~    | ~    | ~    | ✓     | ~     |  |
|             |       | Table 3.A            | ~                         | ~    | ~    | ~    | ~    | ~    | ~    | ~    | ~     | ~    | ~    | ~    | ~     | ~     |  |
|             |       | Table 3.B(a)         | ~                         | ~    | ~    | ~    | ~    | ~    | ~    | ~    | ~     | ~    | ~    | ~    | ~     | ~     |  |
|             |       | Table 3.B(b)         | ~                         | ~    | ~    | ~    | ~    | ~    | ~    | ~    | ~     | ~    | ~    | ~    | ~     | ~     |  |
| Agriculture |       | Table 3.C            | ~                         | ~    | ~    | ~    | ~    | ~    | ~    | ~    | ~     | ~    | ~    | ~    | ~     | ~     |  |
| Agric       | SBDT  | Table 3.D            | √                         | ~    | ~    | ~    | ~    | ~    | ~    | ~    | ~     | ~    | ~    | ~    | ~     | ~     |  |
|             |       | Table 3.E            | ~                         | ~    | ~    | ~    | ~    | ~    | ~    | ~    | ~     | ~    | ~    | ~    | ~     | ~     | No numerical data are reported in this table for the years 1990–2014. For these years the notation key NO is used. |
|             |       | Table 3.F            | ~                         | ~    | ~    | ~    | ~    | ~    | ~    | ~    | ~     | ~    | ~    | ~    | ~     | ~     | No numerical data are reported in this table for the years 1990–2014. For these years the notation key NO is used. |
|             |       | Table 3.G-I          | ~                         | ~    | ~    | ~    | ~    | ~    | ~    | ~    | ~     | ~    | ~    | ~    | ~     | ~     |  |
|             | Secto | oral report: Table 4 | ~                         | ~    | ~    | ~    | ~    | ~    | ~    | ~    | ~     | ~    | ~    | ~    | ~     | ~     |  |
|             |       | Table 4.1            | ~                         | ~    | ~    | ~    | ~    | ~    | ~    | ~    | ~     | ~    | ~    | ~    | ~     | ~     |  |
|             |       | Table 4.A            | ✓                         | ~    | ~    | ~    | ~    | ~    | ~    | ~    | ~     | ~    | ~    | ~    | ~     | ~     |  |
| LULUCF      |       | Table 4.B            | ~                         | ~    | ~    | ~    | ✓    | ~    | √    | ~    | ~     | ~    | ~    | √    | ~     | ~     |  |
| LUL         | SBDT  | Table 4.C            | ~                         | ~    | ~    | ~    | ✓    | ✓    | ~    | ~    | √     | ~    | ~    | ~    | ~     | ~     |  |
|             |       | Table 4.D            | ✓                         | ~    | ~    | ✓    | ~    | ~    | ~    | ~    | √     | ✓    | ✓    | ~    | ~     | ~     |  |
|             |       | Table 4.E            | ✓                         | ~    | ~    | ~    | ~    | ~    | ~    | ~    | √     | ✓    | ~    | ~    | ~     | ~     |  |
|             |       | Table 4.F            | ✓                         | ~    | ~    | ✓    | ✓    | ✓    | √    | ✓    | ~     | ✓    | ✓    | ✓    | ~     | √     |  |

|              |                           |      |      |      |      |      | F    | Provis | sion | of co | mme  | on rej | porti |      | PART II<br>rmat tables for years reported (continued)   |
|--------------|---------------------------|------|------|------|------|------|------|--------|------|-------|------|--------|-------|------|---|
|              |                           |      |      |      |      |      | Year | rs     |      |       |      |        |       |      |   |
|              | Base<br>year <sup>a</sup> | 0661 | 1995 | 2000 | 2005 | 2006 | 2007 | 2008   | 2009 | 2010  | 2011 | 2012   | 2013  | 2014 | Comments  |
| Table 4.G    | ~                         | ~    | ~    | ~    | ~    | ~    | ~    | ~      | ~    | ~     | ~    | ~      | ~     | ~    |   |
| Table 4(I)   | ~                         | ~    | ~    | ~    | ~    | ~    | ~    | ~      | ~    | ~     | ~    | ~      | ~     | ~    | No numerical data are reported in this table for the years 1990–2014. For these years the notation keys NA and NO are used. |
| Table 4(II)  | ~                         | ~    | ~    | ~    | ~    | ~    | ~    | ~      | ~    | ~     | ~    | ~      | ~     | ~    |   |
| Table 4(III) | ✓                         | ~    | ~    | ~    | ~    | ~    | ~    | ~      | ~    | ~     | ~    | ~      | ~     | ~    |   |
| Table 4(IV)  | ~                         | ~    | ~    | ~    | ~    | ~    | ~    | ~      | ~    | ~     | ~    | ~      | ~     | ~    | No numerical data are reported in this table for the years 1990–2014. For these years the notation keys NE and NO are used. |
| Table 4(V)   | ~                         | ~    | ~    | ~    | ~    | ~    | ~    | ~      | ~    | ~     | ~    | ~      | ~     | ~    |   |

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|            |                |                    |                                  |                           |      |      |      |      |      | n    | Duari | cion | of oo |      |      | norti |       | PART II prmat tables for years reported (continued)  |
|------------|----------------|--------------------|----------------------------------|---------------------------|------|------|------|------|------|------|-------|------|-------|------|------|-------|-------|--|
|            |                |                    |                                  | I I                       |      |      |      |      |      | Year |       | SION | 01 CO | mmo  | n re | роги  | ng Io |  |
|            |                |                    |                                  | Base<br>year <sup>a</sup> | 0661 | 1995 | 2000 | 2005 | 2006 | 2007 | 2008  | 2009 | 2010  | 2011 | 2012 | 2013  | 2014  | Comments   |
|            | Secto<br>repoi |                    | Table<br>NIR-1                   |                           |      |      |      |      |      |      |       |      |       |      | •    | ~     | ~     |  |
|            |                |                    | Table<br>NIR-2                   |                           |      |      |      |      |      |      |       |      |       |      |      | ~     | ~     |  |
|            |                |                    | Table<br>NIR-3                   |                           |      |      |      |      |      |      |       |      |       |      |      |       |       |  |
|            |                |                    | Table<br>4(KP)Rec<br>alculations | ~                         | ✓    |      |      |      |      |      |       |      |       |      |      | ~     |       |  |
|            |                |                    | Table<br>4(KP)                   | ~                         | ~    |      |      |      |      |      |       |      |       |      |      | ~     | ~     | No numerical data are reported in this table for the year 1990. For this year the notation key NA is used.         |
| $_{ICFc}$  |                | Table 4            | 4(KP-I)A.1                       |                           |      |      |      |      |      |      |       |      |       |      |      | ~     | ~     |  |
| KP-LULUCFc |                | Table<br>4(KP-I    | )A.1.1                           |                           |      |      |      |      |      |      |       |      |       |      |      | ✓<br> | ~     | No numerical data are reported in this table for the years 2013–2014. For these years the notation key NA is used. |
|            |                | Table 4            | 4(KP-I)A.2                       |                           |      |      |      |      |      |      |       |      |       |      |      | ~     | ~     |  |
|            |                | Table 4<br>I)A.2.1 |                                  |                           |      |      |      |      |      |      |       |      |       |      |      | ~     | ~     | No numerical data are reported in this table for the years 2013–2014. For these years the notation key NA is used. |
|            | SBDT           | Table 4            | 4(KP-I)B.1                       |                           |      |      |      |      |      |      |       |      |       |      |      | ~     | ~     |  |
|            |                | Table 4<br>I)B.1.1 |                                  |                           |      |      |      |      |      |      |       |      |       |      |      | ~     | ~     |  |
|            |                | Table 4<br>I)B.1.2 |                                  |                           |      |      |      |      |      |      |       |      |       |      |      |       |       |  |
|            |                | Table 4<br>I)B.1.3 |                                  |                           |      |      |      |      |      |      |       |      |       |      |      | ~     | ~     | No numerical data are reported in this table for the years 2013–2014. For these years the notation key NA is used. |

|                  |                           |      |      |      |      |      | г    | Provi | cion  | of oo |      | n ro | nort | ina f | PART II<br>ormat tables for years reported (continued)   |
|------------------|---------------------------|------|------|------|------|------|------|-------|-------|-------|------|------|------|-------|--|
|                  | Г                         |      |      |      |      |      | Year |       | 51011 |       |      |      | port | ing I |  |
|                  | Base<br>year <sup>a</sup> | 0661 | 1995 | 2000 | 2005 | 2006 | 2007 | 2008  | 2009  | 2010  | 2011 | 2012 | 2013 | 2014  | Comments   |
| Table 4(KP-I)B.2 | ~                         | ~    |      |      |      |      |      |       |       |       |      |      | ~    | ~     | No numerical data are reported in this table for the years 1990, 2013–2014. For these years the notation key NA is used. |
| Table 4(KP-I)B.3 | ~                         | ~    |      |      |      |      |      |       |       |       |      |      | ~    | ~     | No numerical data are reported in this table for the years 1990, 2013–2014. For these years the notation key NA is used. |
| Table 4(KP-I)B.4 | ~                         | ~    |      |      |      |      |      |       |       |       |      |      | ~    | ~     | No numerical data are reported in this table for the years 1990, 2013–2014. For these years the notation key NA is used. |
| Table 4(KP-I)B.5 | ~                         | ~    |      |      |      |      |      |       |       |       |      |      | ~    | ~     | No numerical data are reported in this table for the years 1990, 2013–2014. For these years the notation key NA is used. |
| Table 4(KP-I)C   |                           |      |      |      |      |      |      |       |       |       |      |      | ~    | ~     |  |
| Table 4(KP-II)1  | ~                         | ~    |      |      |      |      |      |       |       |       |      |      | ~    | ~     | No numerical data are reported in this table for the years 1990–2014. For these years the notation key NA is used.       |
| Table 4(KP-II)2  | ~                         | ~    |      |      |      |      |      |       |       |       |      |      | ~    | ~     | No numerical data are reported in this table for the years 1990. For these years the notation key NA is used.            |
| Table 4(KP-II)3  | ~                         | ~    |      |      |      |      |      |       |       |       |      |      | ~    | ~     | No numerical data are reported in this table for the years 1990. For these years the notation key NA is used.            |
| Table 4(KP-II)4  | ~                         | ~    |      |      |      |      |      |       |       |       |      |      | ~    | ~     | No numerical data are reported in this table for the years 1990. For these years the notation key NA is used.            |
| Table Accounting | ~                         | ~    |      |      |      |      |      |       |       |       |      |      | ~    | ~     | No numerical data are reported in this table for the years 1990. For these years the notation key NA is used.            |

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|        |      |                       |                           |      |      |      |      | р    | rovis | ion ( | of cor | nma  | n ror | orti |        |      | T II<br>tables for years reported (continued) |
|--------|------|-----------------------|---------------------------|------|------|------|------|------|-------|-------|--------|------|-------|------|--------|------|---|
|        |      |                       | Г                         |      |      |      |      | -    | Year  |       |        |      |       |      | iig iu | 1114 |   |
|        |      |                       | Base<br>year <sup>a</sup> | 0661 | 1995 | 2000 | 2005 | 2006 | 2007  | 2008  | 2009   | 2010 | 2011  | 2012 | 2013   | 2014 | Comments                                      |
|        | Sect | toral report: Table 5 | ✓                         | ~    | ✓    | ✓    | ~    | ~    | ~     | ~     | ~      | ✓    | ~     | ~    | ~      | ~    |   |
| CF     |      | Table 5.A             | √                         | ~    | ~    | ~    | ~    | ~    | ~     | ~     | ~      | ~    | ~     | ~    | ~      | ~    |   |
| LULUCF | ЪТ   | Table 5.B             | √                         | ~    | ~    | ~    | ~    | ~    | ~     | ~     | ~      | ~    | ~     | ~    | ~      | ~    |   |
| KP-    | SBL  | Table 5.C             | √                         | ~    | ~    | ~    | ~    | ~    | ~     | ~     | ~      | ~    | ~     | ~    | ~      | ~    |   |
|        |      | Table 5.D             | ✓                         | ~    | ~    | ✓    | ~    | ~    | ~     | ~     | ~      | ~    | ~     | ~    | ~      | ~    |   |

|                          |  |                           |      |      |      |      |      |       |        |      |       |      |      | PA   | RT    | II       |                                    |
|--------------------------|--|---------------------------|------|------|------|------|------|-------|--------|------|-------|------|------|------|-------|----------|------------------------------------|
|                          |  | •                         |      |      |      |      | Pro  | visio | n of c | omn  | ion r | epor | ting | form | nat t | tabl     | les for years reported (continued) |
|                          |  |                           |      |      |      |      |      | Yea   | rs     |      |       |      |      |      |       |          |                                    |
|                          |  | Base<br>year <sup>a</sup> | 1990 | 1995 | 2000 | 2005 | 2006 | 2007  | 2008   | 2009 | 2010  | 2011 | 2012 | 2013 | 1100  | 2014     | Comments                           |
|                          | Summary 1.A  | ✓                         | ~    | ~    | ~    | ~    | ~    | ~     | ~      | ~    | ~     | ~    | ~    | ~    | ~     | ·        |                                    |
|                          | Summary 2 (CO <sub>2</sub> equivalent emissions)   | √                         | ~    | ~    | ~    | ~    | ~    | ~     | ~      | ~    | ~     | ~    | ~    | ~    | ~     | <i>,</i> |                                    |
| les                      | Summary 3<br>(Methods/emission factors)            | ~                         | ~    | ~    | ~    | ~    | ~    | ~     | ~      | ~    | ~     | ~    | ~    | ~    | ~     | ·        |                                    |
| Summary and other tables | Table 6 (Indirect emissions of $N_2O$ and $CO_2$ ) | ~                         | ~    | ~    | ~    | ~    | ~    | ~     | ~      | ~    | ~     | ~    | ~    | ~    | ~     | ,        |                                    |
| umma                     | Table 7 (Key categories)                           | ~                         | ~    | ~    | ~    | ~    | ~    | ~     | ~      | ~    | ~     | ~    | ~    | ~    | ~     | ,        |                                    |
| 2                        | Table 8 (Recalculation – recalculated data)        | √                         | ~    | ~    | ~    | ~    | ~    | ~     | ~      | ~    | ~     | ~    | ~    | ~    |       |          |                                    |
|                          | Table 9 (Completeness)                             | ~                         | ~    | ~    | ~    | ~    | ~    | ~     | ~      | ~    | ~     | ~    | ~    | ~    | ~     | ·        |                                    |
|                          | Table 10 (Trends)                                  | ✓                         | ~    | ~    | ~    | ~    | ~    | ~     | ~      | ~    | ~     | ~    | ~    | ~    | ~     | '        |                                    |

<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 decisions 9/CP.2 and 11/CP.4.

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| PART III  |   |  |              |             |                 |              |              |
|---|---|--|--------------|-------------|-----------------|--------------|--------------|
| Provision of information relating to recalculations |   |  |              |             |                 |              |              |
| Table 8 (Recalculated data)                         | ble 8 (Recalculated data) 🗸 Comments Information on recalculations available in Chapter 10 of the NIR |  |              |             |                 |              |              |
| Recalculation reported for years                    | ecalculation reported for years 1990-2013   |  |              |             |                 |              |              |
| Recalculated sectors/gases                          | Energy  |  | IPPU         | Agriculture | LULUCF          | Waste        | KP-LULUCF    |
| $CO_2$  | ✓   |  | ✓            | ✓           | ~               | $\checkmark$ | $\checkmark$ |
| CH <sub>4</sub>                                     | ~   |  | ✓            | ✓           | ✓               | ~            | $\checkmark$ |
| N <sub>2</sub> O                                    | ~   |  | ✓            | ✓           | ✓               | ~            | $\checkmark$ |
| HFCs  |   |  | ✓            |             |                 |              |              |
| PFCs  |   |  | ✓            |             |                 |              |              |
| Unspecified mix of HFCs and PFCs                    |   |  | Ý            |             |                 |              |              |
| $SF_6$  |   |  | ✓            |             |                 |              |              |
| NF <sub>3</sub>                                     |   |  | ✓            |             |                 |              |              |
| -   | Base year estimate: <sup>a</sup>  |  | With LULUCF: | 5.73%       | Without LULUCF: | 3.61%        |              |
| aggregate greenhouse gas<br>emission                | Latest recalculated year: <sup>b</sup>  |  | With LULUCF: | 10.91%      | Without LULUCF: | 3.58%        |              |

## FCCC/ASR/2016/UKR

<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 decisions 9/CP.2 and 11/CP.4. <sup>*b*</sup> The latest recalculated year is the submission year minus 3.

|   | PART IV   |   |          |   |  |
|---|---|---|----------|---|--|
|   | Provision of information relating to KP-LULUCF activities under Article 3, paragraphs 3 and 4   |   |          |   |  |
|   |   |   |          | Observation   |  |
|   | Emissions by sources and removals by sinks are clearly distinguished from emissions from categories included in Annex A to the Kyoto Protocol   |   | <b>√</b> |   |  |
|   | Information on how inventory methodologies have been applied taking into account the 2006<br>Intergovernmental Panel on Climate Change Guidelines for National Greenhouse Gas Inventories and<br>any relevant supplementary guidance recognzing the principles laid out in decision 16/CMP.1.         |   | ~        |   |  |
| -5  | Information on 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  | ✓        |   |  |
| /CMP.8, ı   | Information on the spatial assessment unit for determining the area of accounting for afforestation, reforestation and deforestation  |   | ~        |   |  |
| requirements under decision 2/CMP.8, annex II, paragraphs 1–5 | 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. |   | <b>√</b> |   |  |
| ements und  | Information on carbon pools (above-ground/below-ground biomass, litter, dead wood and soil organic carbon) that are not accounted for.  |   | ~        |   |  |
| Reporting 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, when needed. For this purpose the Party shall include information showing:  |   |          |   |  |
|   |   | That all lands subject to exclusion due to natural disturbances are identified  |          | Ukraine does not intend to apply the provisions to exclude<br>emissions from natural disturbances |  |
|   |   | How annual emissions resulting from natural disturbances and the subsequent removals are estimated and excluded from accounting   |          | Ukraine does not intend to apply the provisions to exclude<br>emissions from natural disturbances |  |
|   |   | That no land-use change has occurred on lands for which the provisions in decision 2/CMP.7, annex, paragraph 33, are applied  |          | Ukraine does not intend to apply the provisions to exclude<br>emissions from natural disturbances |  |

|   | PART IV  |          |   |  |  |
|---|--|----------|---|--|--|
| Provision of information relating to KP-LULUCF activities under Article 3, paragraphs 3 and 4 (continued) |  |          |   |  |  |
|   |  | Provided | Observation   |  |  |
|   | That events and circumstances were beyond the control of the Party   |          | Ukraine does not intend to apply the provisions to exclude<br>emissions from natural disturbances                     |  |  |
|   | The efforts taken to rehabilitate the land for which the provisions contained in decision 2/CMP.7, annex, paragraph 33, are applied  |          | Ukraine does not intend to apply the provisions to exclude<br>emissions from natural disturbances                     |  |  |
|   | That emissions associated with salvage logging were not excluded from accounting   |          | Ukraine does not intend to apply the provisions to exclude<br>emissions from natural disturbances                     |  |  |
|   | 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   |          | Information required in paragraph 2(g)(ii) of annex II to decision 2/CMP.8 could not be identified in the submission  |  |  |
|   | 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 |          | Information required in paragraph 2(g)(iii) of annex II to decision 2/CMP.8 could not be identified in the submission |  |  |
|   | 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                   |          | Information required in paragraph 2(g)(iv) of annex II to decision 2/CMP.8 could not be identified in the submission  |  |  |
|   | How the HWP resulting from deforestation have been accounted on the basis of instantaneous oxidation   |          | Information required in paragraph 2(g)(v) of annex II to decision 2/CMP.8 could not be identified in the submission   |  |  |
|   | How CO2 emissions from HWP in SWDS and from wood harvested for energy purposes have<br>been accounted on the basis of instantaneous oxidation  |          | Information required in paragraph 2(g)(vi) of annex II to decision 2/CMP.8 could not be identified in the submission  |  |  |
|   | How emissions/removals from changes in the HWP pool accounted for do not include imported harvested wood products  |          | Information required in paragraph 2(g)(vii) of annex II to decision 2/CMP.8 could not be identified in the submission |  |  |

|   | PART IV  |          |   |
|---|--|----------|---|
| Provision of information relating to KP-LULUCF activities under Article 3, paragraphs 3 and 4 (continued) |  |          |   |
|   |  | Provided | Observation   |
|   | rmation on anthropogenic GHGs from LULUCF activities under Article 3, paragraph 3, and Article aragraph 4, factoring out removals from:  |          | •   |
|   | Elevated CO <sub>2</sub> concentrations above pre-industrial levels  | ✓        |   |
|   | Indirect nitrogen deposition   | ✓        |   |
|   | The dynamic effects of age structure resulting from activities prior to 1 January 1990   | ✓        |   |
| Spec  | ific 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<br>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  | ~        |   |
| Spec  | ific 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 |          | Ukraine does not elect cropland management, grazing land<br>management, revegetation or wetland drainage and rewettin |
|   | 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   | ~        |   |
|   | Methodological consistency between the reference level and reporting for forest management   |          | Information required in paragraph 5(e) of annex II to decision 2/CMP.8 could not be identified in the submission      |
|   | 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:                        |          |   |

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|   | PART IV  |          |   |  |  |
|---|--|----------|---|--|--|
| Provision of information relating to KP-LULUCF activities under Article 3, paragraphs 3 and 4 (continued) |  |          |   |  |  |
|   |  | Provided | Observation   |  |  |
|   | 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  |          | Information required in paragraph 5(g)(i) of annex II to decision 2/CMP.8 could not be identified in the submission   |  |  |
|   | A demonstration that the forest plantation was first established through direct human-<br>induced planting and/or seeding of non-forest land before 1 January 1990, and, if the<br>forest plantation was re-established, that this last occurred on forest land through direct<br>human-induced planting and/or seeding after 1 January 1960 |          | Information required in paragraph 5(g)(ii) of annex II to decision 2/CMP.8 could not be identified in the submission  |  |  |
|   | 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 non-forested land that did not contain forest on 31 December 1989  |          | Information required in paragraph 5(g)(iii) of annex II to decision 2/CMP.8 could not be identified in the submission |  |  |
|   | 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                 |          | Information required in paragraph 5(g)(iv) of annex II to decision 2/CMP.8 could not be identified in the submission  |  |  |