



UNITED
NATIONS



Framework Convention
on Climate Change

Distr.
GENERAL

FCCC/ASR/2008/JPN
23 June 2008

ENGLISH ONLY

Annual status report of the greenhouse gas inventory of Japan

1. This status report was prepared by the expert review team in accordance with decision 22/CMP.1 as part of the initial check of the greenhouse gas inventory submitted. It reflects the content of the inventory of 2008 as submitted by the Party.
2. In this report, the following abbreviations are used:

CRF: common reporting format
LULUCF: land use, land-use change and forestry
KP-LULUCF CRF: tables for reporting activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol
NIR: national inventory report
SBDT: sectoral background data tables

Notation keys

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

Greenhouse gases

CO₂: carbon dioxide
CH₄: methane
N₂O: nitrous oxide
HFCs: hydrofluorocarbons
PFCs: perfluorocarbons
SF₆: sulphur hexafluoride
NO_x: nitrogen oxides
CO: carbon monoxide
NMVOCs: non-methane volatile organic compounds
SO₂: sulphur dioxide

| INTRODUCTION | | | | | | | | | | | | |
|---------------------------|--|--|-----------------|----------------------|---|------|-----------------|-----------------|----|--------|-----------------|--|
| General information | Date of receipt | | | Date of resubmission | | | Comments | | | | | |
| | CRF ^a | 16/05/2008 | | | | | | | | | | |
| | NIR | 16/05/2008 | | | | | | | | | | |
| | Additional information ^b | | | | | | | | | | | |
| | KP-LULUCF CRF ^c | 16/05/2008 | | | | | | | | | | |
| | KP-LULUCF information ^d | 16/05/2008 | | | | | | | | | | |
| | CRF provided for years | CRF | 1990–2006 | | KP-LULUCF | | | 2006 | | | | |
| | Base year or period | 1990 | | | Base year for HFCs, PFCs and SF ₆ ^e | | | 1995 | | | | |
| | Gases covered | CO ₂ | CH ₄ | N ₂ O | HFCs | PFCs | SF ₆ | NO _x | CO | NMVOCs | SO ₂ | |
| | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| National inventory report | Description | The organization of the NIR follows the structure as outlined in the revised UNFCCC reporting guidelines (decision 18/CP.8). | | | | | | | | | | |
| | Language of NIR | English | | | | | | | | | | |
| Common reporting format | Missing source category larger than 7 per cent for Annex A sources | No missing source category larger than 7 per cent has been identified | | | | | | | | | | |

^a CRF refers to the common reporting format tables included in document FCCC/SBSTA/2006/9.

^b Additional information can be any information submitted by a Party in conjunction with the national inventory report (NIR) or CRF tables.

^c Parties to the Kyoto Protocol are required to report anthropogenic greenhouse gas emissions by sources and removals by sinks from land use, land-use change and forestry activities under Article 3, paragraph 3, and, if any, elected activities under Article 3, paragraph 4, using the agreed common reporting format tables (decision 6/CMP.3). The reporting of KP-LULUCF CRF tables is voluntary until the 2010 submission.

^d Parties to the Kyoto Protocol are required to include in their annual greenhouse gas inventories information on anthropogenic greenhouse gas emissions by sources and removals by sinks from land use, land-use change and forestry activities under Article 3, paragraph 3, and, if any, elected activities under Article 3, paragraph 4, in accordance with paragraphs 5–9 in the annex to decision 15/CMP.1. The reporting of this information is voluntary until the 2010 submission.

^e A Party can choose 1990 or 1995 as its base year for the fluorinated gases in accordance with Article 3, paragraph 8, of the Kyoto Protocol.

| PART I | | | | | | | | | | | | | | | |
|--|---|--------------------|---|----------------------|--------------------------|------------------------|------------|---------------------------------|---------------------------|--|---------------------------------------|--|---|-------|---|
| Provision of information for the latest reported inventory year in the CRF: 2006 | | | | | | | | | | | | | | | |
| Tables | | Energy | | Industrial processes | | Solvent use | | Agriculture | | Land use, land-use change and forestry | | Land use, land-use change and forestry (KP) ^a | | Waste | |
| | Sectoral report tables | 1 | ✓ | 2(I) | ✓ | 3 | ✓ | 4 | ✓ | 5 | ✓ | 5(KP) | ✓ | 6 | ✓ |
| | Sectoral background data tables | 1.A(a) | ✓ | 2(I).A-G | ✓ | 3.A-D | ✓ | 4.A | ✓ | 5.A | ✓ | 5(KP-I)A.1.1 | ✓ | 6.A | ✓ |
| | | 1.A(b) | ✓ | 2(II).C | ✓ | | | 4.B(a) | ✓ | 5.B | ✓ | 5(KP-I)A.1.2 | | 6.B | ✓ |
| | | 1.A(c) | ✓ | 2(II).E | ✓ | | | 4.B(b) | ✓ | 5.C | ✓ | 5(KP-I)A.1.3 | | 6.C | ✓ |
| | | 1.A(d) | ✓ | 2(II).F | ✓ | | | 4.C | ✓ | 5.D | ✓ | 5(KP-I)A.2 | ✓ | | |
| | | 1.B.1 | ✓ | | | | | 4.D | ✓ | 5.E | ✓ | 5(KP-I)A.2.1 | | | |
| | | 1.B.2 | ✓ | | | 4.E | ✓ | 5.F | ✓ | 5(KP-I)B.1 | ✓ | | | | |
| | | 1.C | ✓ | | | 4.F | ✓ | 5 (I) | ✓ | 5(KP-I)B.2 | | | | | |
| | | Bunkers separately | | ✓ | 5 (II) | ✓ | 5(KP-I)B.3 | | | | | | | | |
| | | | | | 5 (III) | ✓ | 5(KP-I)B.4 | ✓ | | | | | | | |
| | | | | | 5 (IV) | ✓ | 5(KP-II)1 | ✓ | | | | | | | |
| | | | | 5 (V) | ✓ | 5(KP-II)2 | ✓ | | | | | | | | |
| | | | | | | 5(KP-II)3 | ✓ | | | | | | | | |
| | | | | | | 5(KP-II)4 | ✓ | | | | | | | | |
| | | | | | 5(KP-II)5 | ✓ | | | | | | | | | |
| | | | | | Accounting table | | | | | | | | | | |
| Summary tables (emission totals) | Summary 1.A | | | ✓ | Summary 1.B | | | ✓ | Summary 2 | | | ✓ | | | |
| Other tables | Summary 3 | | | ✓ | Table 7 (Key categories) | | | ✓ | Table 9(a) (Completeness) | | | ✓ | | | |
| | Table 10 (Trends) | | | ✓ | | | | | Table 9(b) (Completeness) | | | | | | |
| Comments | | | | | | | | | | | | | | | |
| Totals | Provided for gases | CO ₂ ✓ | | CH ₄ ✓ | | N ₂ O ✓ | | HFCs ✓ | | PFCs ✓ | | SF ₆ ✓ | | | |
| | Provided for years | 1990–2006 | | 1990–2006 | | 1990–2006 | | 1990–2006 | | 1990–2006 | | 1990–2006 | | | |
| CO ₂ | Comparison of CO ₂ from fuel combustion | Reference approach | | | Sectoral approach | | | Difference more than 2 per cent | | | If difference is more than 2 per cent | | | | |
| | | ✓ | | | ✓ | | | | | | Explanation provided | | | | |
| HFCs, PFCs, SF ₆ | Disaggregation by species | | | | HFCs | | | PFCs | | | SF ₆ | | | | |
| | | | | | ✓ | | | ✓ | | | | | | | |
| | Reporting of actual and/or potential emission estimates in the consumption of halocarbons and SF ₆ | | | | Actual | Potential | Actual | Potential | Actual | Potential | Actual | Potential | | | |
| | | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | |
| Notation keys | Used in | Summary table 1.A | | | ✓ | Sectoral report tables | | | ✓ | Sectoral background data tables | | | ✓ | | |
| | Comments | | | | | | | | | | | | | | |

^a The reporting of KP-LULUCF CRF tables is voluntary until the 2010 submission.

PART II
Provision of CRF tables for years reported (continued)

| | | Years | | | | | | | | | | | | | | | | Information gaps relating to reporting ^b | Comments | | | |
|---|---------------------------------|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---|----------|------|---|--|
| | | Base year ^a | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | | | 2005 | 2006 | |
| Agriculture | Sectoral report: Table 4 | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | |
| | Table 4.A | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | Numerical values are included only for population size and implied emission factors | |
| | Table 4.B(a) | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | |
| | Table 4.B(b) | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | |
| | Table 4.C | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| | Table 4.D | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Table 4.E | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | No data are reported in this table, but for years 1990–2003 notation keys NE, NO are used and for years 2004–2006 notation key NO is used. |
| | Table 4.F | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Land use, land-use change and forestry | Sectoral report: Table 5 | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| | Table 5.A | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| | Table 5.B | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| | Table 5.C | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| | Table 5.D | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| | Table 5.E | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| | Table 5.F | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| | Table 5 (I) | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | No data are reported in this table, but notation key IE is used. |
| | Table 5 (II) | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | No data are reported in this table, but notation keys NE, NO are used. |
| | Table 5 (III) | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| | Table 5 (IV) | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | No data are reported in this table, but notation key NE is used. |
| Table 5 (V) | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | |

PART II
Provision of CRF tables for years reported (continued)

| | Base year ^a | Years | | | | | | | | | | | | | | | Information gaps relating to reporting ^b | Comments | | | |
|--------------------------------------|------------------------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---|----------|---|------|--|
| | | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | | | 2005 | 2006 | |
| Sectoral report: Table 5 (KP) | | | | | | | | | | | | | | | | | | ✓ | No data are reported in this table, but notation key NO and '0' are used. | | |
| SBDT | Table 5(KP-I)A.1.1 | | | | | | | | | | | | | | | | | ✓ | ✓ | | |
| | Table 5(KP-I)A.1.2 | | | | | | | | | | | | | | | | | | | | |
| | Table 5(KP-I)A.1.3 | | | | | | | | | | | | | | | | | | | | |
| | Table 5(KP-I)A.2 | | | | | | | | | | | | | | | | | ✓ | ✓ | | |
| | Table 5(KP-I)A.2.1 | | | | | | | | | | | | | | | | | | | | |
| | Table 5(KP-I)B.1 | | | | | | | | | | | | | | | | | | ✓ | ✓ | |
| | Table 5(KP-I)B.2 | | | | | | | | | | | | | | | | | | | | |
| | Table 5(KP-I)B.3 | | | | | | | | | | | | | | | | | | | | |
| | Table 5(KP-I)B.4 | | | | | | | | | | | | | | | | | | ✓ | | |
| | Table 5(KP-II)1 | | | | | | | | | | | | | | | | | | ✓ | ✓ | No data are reported in this table, but notation key IE is used. |
| | Table 5(KP-II)2 | | | | | | | | | | | | | | | | | | ✓ | | No data are reported in this table, but notation keys NE, NO are used. |
| | Table 5(KP-II)3 | | | | | | | | | | | | | | | | | | ✓ | | |
| | Table 5(KP-II)4 | | | | | | | | | | | | | | | | | | ✓ | ✓ | |
| | Table 5(KP-II)5 | | | | | | | | | | | | | | | | | | ✓ | ✓ | |
| | Accounting table | | | | | | | | | | | | | | | | | | ✓ | ✓ | |

PART II
Provision of CRF tables for years reported (continued)

| | | Years | | | | | | | | | | | | | | | | Information gaps relating to reporting ^b | Comments | | | |
|---------------------------------|--|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---|----------|------|------|--|
| | | Base year ^a | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | | | 2005 | 2006 | |
| Waste | Sectoral report: Table 6 | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | |
| | SBDT Table 6.A | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | |
| | Table 6.B | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | |
| | Table 6.C | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | |
| Summary and other tables | SBDT Summary 1.A | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | |
| | Summary 1.B | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | |
| | Summary 2 (CO ₂ equivalent emissions) | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | |
| | Summary 3 (Methods/emission factors) | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| | Table 7 (Key categories) | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | |
| | Table 8(a) (Recalculation – recalculated data) | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | |
| | Table 8(b) (Recalculation – explanatory information) | | | | | | | | | | | | | ✓ | | ✓ | ✓ | ✓ | | ✓ | | |
| | Table 9(a) (Completeness) | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| | Table 9(b) (Completeness) | | | | | | | | | | | | | | | | | | | | | |
| | Table 10 (Trends) | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | |

^a This column indicates that the Party uses a base year other than 1990 in accordance with decisions 9/CP.2 and 11/CP.4, and does not reflect the choice of a base year for the fluorinated gases.

^b This column indicates that reporting gaps (blank cells) have been identified in a given table of the CRF, owing to limited use, or lack of, notation keys (NO, NE, NA, IE, C).

^c Parties to the Kyoto Protocol are required to report anthropogenic greenhouse gas emissions by sources and removals by sinks from land use, land-use change and forestry activities under Article 3, paragraph 3, and, if any, elected activities under Article 3, paragraph 4, using the agreed common reporting format tables (decision 6/CMP.3). The reporting of KP-LULUCF CRF tables is voluntary until the 2010 submission.

| PART III | | | | | | |
|--|-----------|--|-------------|-------------|--|--------|
| Provision of information relating to recalculations | | | | | | |
| Table 8(a) (Recalculated data) | ✓ | Comments | | | | |
| Recalculation for years | 1990–2005 | | | | | |
| Recalculated sectors/gases | Energy | Industrial processes | Solvent use | Agriculture | Land use, land-use change and forestry | Waste |
| CO ₂ | ✓ | ✓ | | | ✓ | ✓ |
| CH ₄ | ✓ | ✓ | | ✓ | ✓ | ✓ |
| N ₂ O | ✓ | | | ✓ | ✓ | ✓ |
| HFCs | | ✓ | | | | |
| PFCs | | ✓ | | | | |
| SF ₆ | | ✓ | | | | |
| Table 8(b) (Explanatory information) | ✓ | ✓ | | ✓ | ✓ | ✓ |
| Full CRF for the recalculated base year | ✓ | Percentage difference in aggregate greenhouse gas base year estimate | | | with LULUCF | 0.02 % |
| | | | | | without LULUCF | 0.00 % |

⋮