

ANNEX 8A.2

REPORTING TABLES

| | |
|------------------------------|--|
| Year of the Inventory | |
| Contact Name | |
| Country | |
| Organisation | |
| Address | |
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| | |
| Phone | |
| Fax | |
| e-mail | |
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Table A Summary Table (1 of 6) (Updated)

| Categories | Net CO ₂ (1) (2) | CH ₄ | N ₂ O | HFCs | PFCs | SF ₆ | NF ₃ | Other halogenated gases with CO ₂ equivalent conversion factors ⁽³⁾ | Other halogenated gases without CO ₂ equivalent conversion factors ⁽⁴⁾ | NO _x | CO | NMVOCs | SO ₂ |
|--|-----------------------------------|----------------------------------|------------------|------|------|-----------------|-----------------|--|---|-----------------|----|--------|-----------------|
| | (Gg) | CO ₂ equivalents (Gg) | | | | | (Gg) | | (Gg) | (Gg) | | | |
| Total National Emissions and Removals | | | | | | | | | | | | | |
| 1 ENERGY | | | | | | | | | | | | | |
| 1A Fuel Combustion Activities | | | | | | | | | | | | | |
| 1A1 Energy Industries | | | | | | | | | | | | | |
| 1A2 Manufacturing Industries and Construction | | | | | | | | | | | | | |
| 1A3 Transport | | | | | | | | | | | | | |
| 1A4 Other Sectors | | | | | | | | | | | | | |
| 1A5 Non-Specified | | | | | | | | | | | | | |
| 1B Fugitive Emissions from Fuels | | | | | | | | | | | | | |
| 1B1 Solid Fuels | | | | | | | | | | | | | |
| 1B2 Oil and Natural Gas | | | | | | | | | | | | | |
| 1B3 Other Emissions from Energy Production | | | | | | | | | | | | | |
| 1C Carbon Dioxide Transport and Storage | | | | | | | | | | | | | |
| 1C1 Transport of CO ₂ | | | | | | | | | | | | | |
| 1C2 Injection and Storage | | | | | | | | | | | | | |

Table A Summary Table (2 of 6) (Updated)

| Categories | Net CO ₂ (1) (2) | CH ₄ | N ₂ O | HFCs | PFCs | SF ₆ | NF ₃ | Other halogenated gases with CO ₂ equivalent conversion factors ⁽³⁾ | Other halogenated gases without CO ₂ equivalent conversion factors ⁽⁴⁾ | NO _x | CO | NMVOCs | SO ₂ |
|--|-----------------------------------|----------------------------------|------------------|------|------|-----------------|-----------------|--|---|-----------------|----|--------|-----------------|
| | (Gg) | CO ₂ equivalents (Gg) | | | | | | | (Gg) | (Gg) | | | |
| 2 INDUSTRIAL PROCESSES AND PRODUCT USE | | | | | | | | | | | | | |
| 2A Mineral Industry | | | | | | | | | | | | | |
| 2A1 Cement Production | | | | | | | | | | | | | |
| 2A2 Lime Production | | | | | | | | | | | | | |
| 2A3 Glass Production | | | | | | | | | | | | | |
| 2A4 Other Process Uses of Carbonates | | | | | | | | | | | | | |
| 2A5 Other (please specify) | | | | | | | | | | | | | |
| 2B Chemical Industry | | | | | | | | | | | | | |
| 2B1 Ammonia Production | | | | | | | | | | | | | |
| 2B2 Nitric Acid Production | | | | | | | | | | | | | |
| 2B3 Adipic Acid Production | | | | | | | | | | | | | |
| 2B4 Caprolactam, Glyoxal and Glyoxylic Acid Production | | | | | | | | | | | | | |
| 2B5 Carbide Production | | | | | | | | | | | | | |
| 2B6 Titanium Dioxide Production | | | | | | | | | | | | | |
| 2B7 Soda Ash Production | | | | | | | | | | | | | |
| 2B8 Petrochemical and Carbon Black Production | | | | | | | | | | | | | |
| 2B9 Fluorochemical Production | | | | | | | | | | | | | |
| 2B10 Hydrogen Production | | | | | | | | | | | | | |
| 2B11 Other (please specify) | | | | | | | | | | | | | |

Second-order Draft

Table A Summary Table (3 of 6) (Updated)

| Categories | Net CO ₂ (1) (2) | CH ₄ | N ₂ O | HFCs | PFCs | SF ₆ | NF ₃ | Other halogenated gases with CO ₂ equivalent conversion factors ⁽³⁾ | Other halogenated gases without CO ₂ equivalent conversion factors ⁽⁴⁾ | NO _x | CO | NMVOCs | SO ₂ |
|--|-----------------------------------|----------------------------------|------------------|------|------|-----------------|-----------------|--|---|-----------------|------|--------|-----------------|
| | (Gg) | CO ₂ equivalents (Gg) | | | | | | | | (Gg) | (Gg) | | |
| 2C Metal Industry | | | | | | | | | | | | | |
| 2C1 Iron and Steel Production | | | | | | | | | | | | | |
| 2C2 Ferroalloys Production | | | | | | | | | | | | | |
| 2C3 Aluminium Production | | | | | | | | | | | | | |
| 2C4 Magnesium Production | | | | | | | | | | | | | |
| 2C5 Lead Production | | | | | | | | | | | | | |
| 2C6 Zinc Production | | | | | | | | | | | | | |
| 2C7 Rare Earths Production | | | | | | | | | | | | | |
| 2C8 Other (please specify) | | | | | | | | | | | | | |
| 2D Non-Energy Products from Fuels and Solvent Use | | | | | | | | | | | | | |
| 2D1 Lubricant Use | | | | | | | | | | | | | |
| 2D2 Paraffin Wax Use | | | | | | | | | | | | | |
| 2D3 Solvent Use | | | | | | | | | | | | | |
| 2D4 Other (please specify) | | | | | | | | | | | | | |
| 2E Electronics Industry | | | | | | | | | | | | | |
| 2E1 Integrated Circuit or Semiconductor | | | | | | | | | | | | | |
| 2E2 TFT Flat Panel Display | | | | | | | | | | | | | |
| 2E3 Photovoltaics | | | | | | | | | | | | | |
| 2E4 Heat Transfer Fluid | | | | | | | | | | | | | |
| 2E5 Other (please specify) | | | | | | | | | | | | | |

Table A Summary Table (4 of 6) (Updated)

| Categories | Net CO ₂ (1) (2) | CH ₄ | N ₂ O | HFCs | PFCs | SF ₆ | NF ₃ | Other halogenated gases with CO ₂ equivalent conversion factors ⁽³⁾ | Other halogenated gases without CO ₂ equivalent conversion factors ⁽⁴⁾ | NO _x | CO | NMVOCs | SO ₂ |
|--|-----------------------------------|----------------------------------|------------------|------|------|-----------------|----------------------------------|--|---|-----------------|----|--------|-----------------|
| | (Gg) | CO ₂ equivalents (Gg) | | | | | CO ₂ equivalents (Gg) | | (Gg) | (Gg) | | | |
| 2F Product Uses as Substitutes for Ozone Depleting Substances | | | | | | | | | | | | | |
| 2F1 Refrigeration and Air Conditioning | | | | | | | | | | | | | |
| 2F2 Foam Blowing Agents | | | | | | | | | | | | | |
| 2F3 Fire Protection | | | | | | | | | | | | | |
| 2F4 Aerosols | | | | | | | | | | | | | |
| 2F5 Solvents | | | | | | | | | | | | | |
| 2F6 Other Applications | | | | | | | | | | | | | |
| 2G Other Product Manufacture and Use | | | | | | | | | | | | | |
| 2G1 Electrical Equipment | | | | | | | | | | | | | |
| 2G2 Halogenated Gases from Other Product Uses | | | | | | | | | | | | | |
| 2G3 N ₂ O from Product Uses | | | | | | | | | | | | | |
| 2G4 Other (please specify) | | | | | | | | | | | | | |
| 2H Other (please specify) | | | | | | | | | | | | | |
| 2H1 Pulp and Paper Industry | | | | | | | | | | | | | |
| 2H2 Food and Beverages Industry | | | | | | | | | | | | | |
| 2H3 Other (please specify) | | | | | | | | | | | | | |

Second-order Draft

Table A Summary Table (5 of 6) (Unchanged)

| Categories | Net CO ₂ (1) (2) | CH ₄ | N ₂ O | HFCs | PFCs | SF ₆ | Other halogenated gases with CO ₂ equivalent conversion factors ⁽³⁾ | Other halogenated gases without CO ₂ equivalent conversion factors ⁽⁴⁾ | NO _x | CO | NMVOCs | SO ₂ |
|--|-----------------------------------|-----------------|------------------|----------------------------------|------|-----------------|--|---|-----------------|----|--------|-----------------|
| | (Gg) | | | CO ₂ equivalents (Gg) | | | | (Gg) | (Gg) | | | |
| 3 AGRICULTURE, FORESTRY AND OTHER LAND USE | | | | | | | | | | | | |
| 3A Livestock | | | | | | | | | | | | |
| 3A1 Enteric Fermentation | | | | | | | | | | | | |
| 3A2 Manure Management | | | | | | | | | | | | |
| 3B Land | | | | | | | | | | | | |
| 3B1 Forest Land | | | | | | | | | | | | |
| 3B2 Cropland | | | | | | | | | | | | |
| 3B3 Grassland | | | | | | | | | | | | |
| 3B4 Wetlands | | | | | | | | | | | | |
| 3B5 Settlements | | | | | | | | | | | | |
| 3B6 Other Land | | | | | | | | | | | | |
| 3C Aggregate Sources and Non-CO₂ Emissions Sources on Land | | | | | | | | | | | | |
| 3C1 Biomass Burning | | | | | | | | | | | | |
| 3C2 Liming | | | | | | | | | | | | |
| 3C3 Urea Application | | | | | | | | | | | | |
| 3C4 Direct N ₂ O Emissions from Managed Soils | | | | | | | | | | | | |
| 3C5 Indirect N ₂ O Emissions from Managed Soils | | | | | | | | | | | | |
| 3C6 Indirect N ₂ O Emissions from Manure Management | | | | | | | | | | | | |
| 3C7 Rice Cultivations | | | | | | | | | | | | |
| 3C8 Other (please specify) | | | | | | | | | | | | |
| 3D Other | | | | | | | | | | | | |
| 3D1 Harvested Wood Products | | | | | | | | | | | | |
| 3D2 Other (please specify) | | | | | | | | | | | | |

Table A Summary Table (6 of 6) (Unchanged)

| Categories | Net CO ₂ (1) (2) | CH ₄ | N ₂ O | HFCs | PFCs | SF ₆ | Other halogenated gases with CO ₂ equivalent conversion factors ⁽³⁾ | Other halogenated gases without CO ₂ equivalent conversion factors ⁽⁴⁾ | NO _x | CO | NMVOCs | SO ₂ |
|--|-----------------------------------|-----------------|------------------|----------------------------------|------|-----------------|--|---|-----------------|----|--------|-----------------|
| | (Gg) | | | CO ₂ equivalents (Gg) | | | | (Gg) | (Gg) | | | |
| 4 WASTE | | | | | | | | | | | | |
| 4A Solid Waste Disposal | | | | | | | | | | | | |
| 4B Biological Treatment of Solid Waste | | | | | | | | | | | | |
| 4C Incineration and Open Burning of Waste | | | | | | | | | | | | |
| 4D Wastewater Treatment and Discharge | | | | | | | | | | | | |
| 4E Other (please specify) | | | | | | | | | | | | |
| 5 OTHER | | | | | | | | | | | | |
| 5A Indirect N₂O Emissions from the Atmospheric Deposition of Nitrogen in NO_x and NH₃ | | | | | | | | | | | | |
| 5B Other (please specify) | | | | | | | | | | | | |
| Memo items ⁽⁵⁾ | | | | | | | | | | | | |
| International Bunkers | | | | | | | | | | | | |
| International Aviation (International Bunkers) | | | | | | | | | | | | |
| International Water-borne Transport (International Bunkers) | | | | | | | | | | | | |
| Multilateral Operations | | | | | | | | | | | | |

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| Documentation box: |
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Table B Short Summary Table (1 of 2) (Updated)

| Categories | Net CO ₂ (1) (2) | CH ₄ | N ₂ O | HFCs | PFCs | SF ₆ | NF ₃ | Other halogenated gases with CO ₂ equivalent conversion factors ⁽³⁾ | Other halogenated gases without CO ₂ equivalent conversion factors ⁽⁴⁾ | NO _x | CO | NMVOCs | SO ₂ |
|--|-----------------------------------|----------------------------------|------------------|------|------|-----------------|-----------------|--|---|-----------------|----|--------|-----------------|
| | (Gg) | CO ₂ equivalents (Gg) | | | | | | (Gg) | (Gg) | | | | |
| Total National Emissions and Removals | | | | | | | | | | | | | |
| 1 ENERGY | | | | | | | | | | | | | |
| 1A Fuel Combustion Activities | | | | | | | | | | | | | |
| 1B Fugitive Emissions from Fuels | | | | | | | | | | | | | |
| 1C Carbon Dioxide Transport and Storage | | | | | | | | | | | | | |
| 2 INDUSTRIAL PROCESSES AND PRODUCT USE | | | | | | | | | | | | | |
| 2A Mineral Industry | | | | | | | | | | | | | |
| 2B Chemical Industry | | | | | | | | | | | | | |
| 2C Metal Industry | | | | | | | | | | | | | |
| 2D Non-Energy Products from Fuels and Solvent Use | | | | | | | | | | | | | |
| 2E Electronics Industry | | | | | | | | | | | | | |
| 2F Product Uses as Substitutes for Ozone Depleting Substances | | | | | | | | | | | | | |
| 2G Other Product Manufacture and Use | | | | | | | | | | | | | |
| 2H Other | | | | | | | | | | | | | |
| 3 AGRICULTURE, FORESTRY AND OTHER LAND USE | | | | | | | | | | | | | |
| 3A Livestock | | | | | | | | | | | | | |
| 3B Land | | | | | | | | | | | | | |
| 3C Aggregate Sources and Non-CO ₂ Emissions Sources on Land | | | | | | | | | | | | | |
| 3D Other | | | | | | | | | | | | | |
| 4 WASTE | | | | | | | | | | | | | |
| 4A Solid Waste Disposal | | | | | | | | | | | | | |
| 4B Biological Treatment of Solid Waste | | | | | | | | | | | | | |

Second-order Draft

Table B Short Summary Table (2 of 2) (Unchanged)

| Categories | Net CO ₂ (1)(2) | CH ₄ | N ₂ O | HFCs | PFCs | SF ₆ | Other halogenated gases with CO ₂ equivalent conversion factors ⁽³⁾ | Other halogenated gases without CO ₂ equivalent conversion factors ⁽⁴⁾ | NO _x | CO | NMVOCs | SO ₂ |
|---|----------------------------------|-----------------|------------------|----------------------------------|------|-----------------|--|---|-----------------|----|--------|-----------------|
| | (Gg) | | | CO ₂ equivalents (Gg) | | | | (Gg) | (Gg) | | | |
| 4C Incineration and Open Burning of Waste | | | | | | | | | | | | |
| 4D Wastewater Treatment and Discharge | | | | | | | | | | | | |
| 4E Other (please specify) | | | | | | | | | | | | |
| 5 OTHER | | | | | | | | | | | | |
| 5A Indirect N ₂ O emissions from the Atmospheric Deposition of Nitrogen in NO _x and NH ₃ | | | | | | | | | | | | |
| 5B Other (please specify) | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| Memo items ⁽⁵⁾ | | | | | | | | | | | | |
| International Bunkers | | | | | | | | | | | | |
| International Aviation (International Bunkers) | | | | | | | | | | | | |
| International Water-borne Transport (International Bunkers) | | | | | | | | | | | | |
| Multilateral Operations | | | | | | | | | | | | |

(1) CO₂ net emissions (emissions minus removals)(2) Total amount of CO₂ captured for long-term storage is to be reported separately for domestic storage and for export in the documentation box.(3) The other halogenated gases for which the CO₂ equivalent conversion factor is not available should not be included in this column. Such gases should be reported in the column 'Other halogenated gases without CO₂ equivalent conversion factors'.

(4) When this column is used, gases should be listed separately in IPPU Background Tables and Table 2.11 and the name of the gas should be given in the documentation box.

(5) Emissions that are not included in the national total should be reported as memo items.

* Cells to report emissions of NO_x, CO, NMVOC and SO₂ have not been shaded although the physical potential for emissions is lacking for some categories.**Documentation box:**

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Table 1 Energy Sectoral Table (1 of 3) (Unchanged)

| Categories | | CO ₂ | CH ₄ | N ₂ O | NO _x | CO | NMVOCs | SO ₂ |
|-----------------|---|-----------------|-----------------|------------------|-----------------|----|--------|-----------------|
| | | (Gg) | | | | | | |
| 1 ENERGY | | | | | | | | |
| 1A | Fuel Combustion Activities | | | | | | | |
| 1A1 | Energy Industries | | | | | | | |
| 1A1a | Main Activity Electricity and Heat Production | | | | | | | |
| 1A1ai | Electricity Generation | | | | | | | |
| 1A1aii | Combined Heat and Power Generation (CHP) | | | | | | | |
| 1A1aiii | Heat Plants | | | | | | | |
| 1A1b | Petroleum Refining | | | | | | | |
| 1A1c | Manufacture of Solid Fuels and Other Energy Industries | | | | | | | |
| 1A1ci | Manufacture of Solid Fuels | | | | | | | |
| 1A1cii | Other Energy Industries | | | | | | | |
| 1A2 | Manufacturing Industries and Construction | | | | | | | |
| 1A2a | Iron and Steel | | | | | | | |
| 1A2b | Non-Ferrous Metals | | | | | | | |
| 1A2c | Chemicals | | | | | | | |
| 1A2d | Pulp, Paper and Print | | | | | | | |
| 1A2e | Food Processing, Beverages and Tobacco | | | | | | | |
| 1A2f | Non-Metallic Minerals | | | | | | | |
| 1A2g | Transport Equipment | | | | | | | |
| 1A2h | Machinery | | | | | | | |
| 1A2i | Mining (excluding fuels) and Quarrying | | | | | | | |
| 1A2j | Wood and Wood Products | | | | | | | |
| 1A2k | Construction | | | | | | | |
| 1A2l | Textile and Leather | | | | | | | |
| 1A2m | Non-specified Industry | | | | | | | |
| 1A3 | Transport | | | | | | | |
| 1A3a | Civil Aviation | | | | | | | |
| 1A3ai | International Aviation (International Bunkers) ⁽¹⁾ | | | | | | | |
| 1A3aii | Domestic Aviation | | | | | | | |
| 1A3b | Road Transportation | | | | | | | |
| 1A3bi | Cars | | | | | | | |
| 1A3bi | Passenger Cars with 3-way Catalysts | | | | | | | |
| 1A3bi2 | Passenger Cars without 3-way Catalysts | | | | | | | |
| 1A3bii | Light-duty Trucks | | | | | | | |
| 1A3bii1 | Light-duty Trucks with 3-way Catalysts | | | | | | | |
| 1A3bii2 | Light-duty Trucks without 3-way Catalysts | | | | | | | |
| 1A3biii | Heavy-duty Trucks and Buses | | | | | | | |
| 1A3biv | Motorcycles | | | | | | | |
| 1A3bv | Evaporative Emissions from Vehicles | | | | | | | |
| 1A3bvi | Urea-based Catalysts | | | | | | | |
| 1A3c | Railways | | | | | | | |
| 1A3d | Water-borne Navigation | | | | | | | |
| 1A3di | International Water-borne Navigation (International Bunkers) ⁽¹⁾ | | | | | | | |
| 1A3dii | Domestic Water-borne Navigation | | | | | | | |
| 1A3e | Other Transportation | | | | | | | |
| 1A3ei | Pipeline Transport | | | | | | | |
| 1A3eii | Off-road | | | | | | | |

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|------------|--------------------------|--|--|--|--|--|--|
| 1A4 | Other Sectors | | | | | | |
| 1A4 a | Commercial/Institutional | | | | | | |
| 1A4 b | Residential | | | | | | |

Table 1 Energy Sectoral Table (2 of 3) (Updated)

| Categories | | CO ₂ | CH ₄ | N ₂ O | NO _x | CO | NMVOCs | SO ₂ |
|------------|--|-----------------|-----------------|------------------|-----------------|----|--------|-----------------|
| | | (Gg) | | | | | | |
| 1A4 c | Agriculture/Forestry/Fishing/Fish Farms | | | | | | | |
| 1A4 ci | Stationary | | | | | | | |
| 1A4 cii | Off-road Vehicles and Other Machinery | | | | | | | |
| 1A4 ciii | Fishing (mobile combustion) | | | | | | | |
| 1A5 | Non-Specified | | | | | | | |
| 1A5 a | Stationary | | | | | | | |
| 1A5 b | Mobile | | | | | | | |
| 1A5 bi | Mobile (aviation component) | | | | | | | |
| 1A5 bii | Mobile (water-borne component) | | | | | | | |
| 1A5 biii | Mobile (other) | | | | | | | |
| 1A5 c | Multilateral Operations ^{(1) (2)} | | | | | | | |
| 1B | Fugitive Emissions from Fuels | | | | | | | |
| 1B1 | Solid Fuel | | | | | | | |
| 1B1 a | Coal Mining and Handling | | | | | | | |
| 1B1 ai | Underground Mines | | | | | | | |
| 1B1 ai1 | Mining | | | | | | | |
| 1B1 ai2 | Post-mining Seam Gas Emissions | | | | | | | |
| 1B1 ai3 | Abandoned Underground Mines | | | | | | | |
| 1B1 ai4 | Flaring of Drained Methane or Conversion of Methane to CO ₂ | | | | | | | |
| 1B1 aii | Surface Mines | | | | | | | |
| 1B1 aii1 | Mining | | | | | | | |
| 1B1 aii2 | Post-mining Seam Gas Emissions | | | | | | | |
| 1B1 aii3 | Abandoned Surface Mines | | | | | | | |
| 1B1 aiii | Coal Exploration | | | | | | | |
| 1B1 b | Uncontrolled Combustion, and Burning Coal Dumps | | | | | | | |
| 1B1 c | Fuel Transformation | | | | | | | |
| 1B1 ci | Charcoal Production | | | | | | | |
| 1B1 cii | Coke Production | | | | | | | |
| 1B1 ciii | Solid to Solid Fuel Production | | | | | | | |
| 1B1 civ | Gasification Transformation | | | | | | | |
| 1B2 | Oil and Natural Gas | | | | | | | |
| 1B2 a | Oil | | | | | | | |
| 1B2 ai | Exploration | | | | | | | |
| 1B2 aii | Production and Upgrading | | | | | | | |
| 1B2 aiii | Transport | | | | | | | |
| 1B2 aiv | Refining | | | | | | | |
| 1B2 av | Distribution of fuels | | | | | | | |
| 1B2 avi | Others | | | | | | | |
| 1B2 avii | Abandoned Oil Wells | | | | | | | |
| 1B2 b | Natural Gas | | | | | | | |
| 1B2 bi | Exploration | | | | | | | |
| 1B2 bii | Production | | | | | | | |
| 1B2 biii | Processing | | | | | | | |
| 1B2 biv | Transmission and Storage | | | | | | | |
| 1B2 bv | Distribution | | | | | | | |
| 1B2 bvi | Others | | | | | | | |
| 1B2 bvii | Abandoned Gas Wells | | | | | | | |
| 1B3 | Other Emissions from Energy Production | | | | | | | |

| | | | | | | | |
|------------|---|--|--|--|--|--|--|
| 1C | Carbon Dioxide Transport and Storage | | | | | | |
| 1C1 | Transport of CO₂ | | | | | | |
| 1C1 a | Pipelines | | | | | | |
| 1C1 b | Ships | | | | | | |
| 1C1 c | Other (Please specify) | | | | | | |
| 1C2 | Injection and Storage | | | | | | |
| 1C2 a | Injection | | | | | | |
| 1C2 b | Storage | | | | | | |

Table1 Energy Sectoral Table (3 of 3) (Unchanged)

| Categories | CO ₂ | CH ₄ | N ₂ O | NO _x | CO | NMVOCs | SO ₂ |
|---|-----------------|-----------------|------------------|-----------------|----|--------|-----------------|
| | (Gg) | | | | | | |
| Memo items ⁽³⁾ | | | | | | | |
| International Bunkers | | | | | | | |
| International Aviation (International Bunkers) | | | | | | | |
| International Water-borne Transport (International Bunkers) | | | | | | | |
| Multilateral Operations | | | | | | | |
| | | | | | | | |
| Information items | | | | | | | |
| CO ₂ from Biomass Combustion for Energy Production | | | | | | | |

(1) To be reported as a memo item, and not part of the national inventory.

(2) Multilateral operations pursuant to the Charter of the United Nations: including emissions from fuel delivered to the military in the country and delivered to the military of other countries.

(3) Emissions that are not included in the national total should be reported as memos.

* Cells to report emissions of NO_x, CO, NMVOC and SO₂ have not been shaded although the physical potential for emissions is lacking for some categories

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Table 1.1 Energy Background Table: 1A1-1A2 (1 of 2) (Unchanged)

| Categories | Activity (TJ) | | | | | | Emissions (Gg) | | | | | | | | | | | | | | | | | | | | | Information item ⁽²⁾ (Gg) | |
|---|---------------|--------|-----|-------------------|------|----------|-----------------|-----------------|------------------|-----------------|-----------------|------------------|-----------------|-----------------|------------------|-------------------|-----------------|------------------|---------------------|-----------------|------------------|-----------------|------------------|-----------------|-----------------|------------------|--|--------------------------------------|--|
| | | | | | | | Solid | | | Liquid | | | Gas | | | Other fossil fuel | | | Peat ⁽¹⁾ | | | Biomass | | Total | | | CO ₂ amount captured ⁽³⁾ | Biomass | |
| | Solid | Liquid | Gas | Other fossil fuel | Peat | Bio-mass | CO ₂ | CH ₄ | N ₂ O | CO ₂ | CH ₄ | N ₂ O | CO ₂ | CH ₄ | N ₂ O | CO ₂ | CH ₄ | N ₂ O | CO ₂ | CH ₄ | N ₂ O | CH ₄ | N ₂ O | CO ₂ | CH ₄ | N ₂ O | CO ₂ | CO ₂ emitted | |
| 1A Fuel Combustion Activities | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A1 Energy Industries | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A1a Main Activity Electricity and Heat Production | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A1ai Electricity Generation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A1aii Combined Heat and Power Generation (CHP) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A1aiii Heat Plants | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A1b Petroleum Refining | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A1c Manufacture of Solid Fuels and Other Energy Industries | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A1ci Manufacture of Solid Fuels | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A1cii Other Energy Industries | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A2 Manufacturing Industries and Construction | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A2a Iron and Steel | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A2b Non-Ferrous Metals | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A2c Chemicals | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A2d Pulp, Paper and Print | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A2e Food Processing, Beverages and Tobacco | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A2f Non-Metallic Minerals | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A2g Transport Equipment | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Table 1.1 Energy Background Table: 1A1-1A2 (2 of 2) (Unchanged)

| Categories | | Activity (TJ) | | | | | | Emissions (Gg) | | | | | | | | | | | | | | | | | | | | Information item ⁽²⁾ (Gg) | | |
|------------|------------------------|---------------|--------|-----|-------------------|------|----------|-----------------|-----------------|------------------|-----------------|-----------------|------------------|-----------------|-----------------|------------------|-------------------|-----------------|------------------|---------------------|-----------------|------------------|-----------------|------------------|-----------------|-----------------|------------------|--|-----------------|-------------------------|
| | | | | | | | | Solid | | | Liquid | | | Gas | | | Other fossil fuel | | | Peat ⁽¹⁾ | | | Biomass | | Total | | | CO ₂ Amount captured ⁽³⁾ | Biomass | |
| | | Solid | Liquid | Gas | Other fossil fuel | Peat | Bio-mass | CO ₂ | CH ₄ | N ₂ O | CO ₂ | CH ₄ | N ₂ O | CO ₂ | CH ₄ | N ₂ O | CO ₂ | CH ₄ | N ₂ O | CO ₂ | CH ₄ | N ₂ O | CH ₄ | N ₂ O | CO ₂ | CH ₄ | N ₂ O | CO ₂ | CO ₂ | CO ₂ emitted |
| 1A2h | Machinery | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A2i | Mining and Quarrying | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A2j | Wood and Wood Products | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A2k | Construction | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A2l | Textile and Leather | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A2m | Non-specified Industry | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

(1) Although peat is not strictly speaking a fossil fuel, the CO₂ emissions from combustion of peat are included in the national emissions as for fossil fuels. See Chapter 1 of Energy Volume, page 1.15.

(2) Information items that are not themselves emissions, therefore not included in the national total. The carbon should be converted to carbon dioxide. It is subtracted in the CO₂ emission columns (net emissions). Only CO₂ captured for permanent storage in geological reservoirs should be subtracted.

(3) Enter the amount of CO₂ captured as a negative number since this amount is subtracted from total CO₂ produced.

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Table 1.2 Energy Background Table: 1A3-1A5 (1 of 2) (Unchanged)

| Category | Activity (TJ) | | | | | | Emissions (Gg) | | | | | | | | | | | | | | | Total emissions (Gg) | | | | | |
|---|---------------|--------|-----|-------------------|------|----------|-----------------|-----------------|------------------|-----------------|-----------------|------------------|-----------------|-----------------|------------------|-------------------|-----------------|------------------|---------------------|-----------------|------------------|----------------------|------------------|-----------------|-----------------|------------------|--|
| | | | | | | | Solid | | | Liquid | | | Gas | | | Other fossil fuel | | | Peat ⁽¹⁾ | | | | | | Biomass | | |
| | Solid | Liquid | Gas | Other fossil fuel | Peat | Bio-mass | CO ₂ | CH ₄ | N ₂ O | CO ₂ | CH ₄ | N ₂ O | CO ₂ | CH ₄ | N ₂ O | CO ₂ | CH ₄ | N ₂ O | CO ₂ | CH ₄ | N ₂ O | CH ₄ | N ₂ O | CO ₂ | CH ₄ | N ₂ O | |
| 1A3 Transport | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A3a Civil Aviation | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A3ai International Aviation (International Bunkers) ⁽²⁾ | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A3aii Domestic Aviation | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A3b Road Transportation | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A3bi Cars | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A3bi1 Passenger Cars with 3-way catalysts | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A3bi2 Passenger Cars without 3-way Catalysts | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A3bii Light-duty Trucks | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A3bii1 Light-duty Trucks with 3-way Catalysts | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A3bii2 Light-duty Trucks without 3-way Catalysts | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A3biii Heavy-duty Trucks and Buses | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A3biv Motorcycles | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A3bv Evaporative Emissions from Vehicles | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A3bvi Urea based Catalyst ⁽³⁾ | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A3c Railways | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A3d Water-borne Navigation | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A3di International Water-borne Navigation (International Bunkers) ⁽²⁾ | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A3dii Domestic Water-borne Transport | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A3e Other Transportation | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A3ei Pipeline Transport | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A3eii Off-road | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A4 Other Sectors | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A4a Commercial/Institutional | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A4b Residential | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14Ac Agriculture/Forestry/Fishing/Fish Farms | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A4ci Stationary | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A4cii Off-road Vehicles and Other Machinery | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A4ciii Fishing (mobile combustion) | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Table 1.2 Energy Background Table: 1A3-1A5 (2 of 2) (Unchanged)

| Category | Activity (TJ) | | | | | | Emissions (Gg) | | | | | | | | | | | | | | | Total emissions (Gg) | | | | | | |
|---|---------------|--------|-----|-------------------|------|----------|-----------------|-----------------|------------------|-----------------|-----------------|------------------|-----------------|-----------------|------------------|-------------------|-----------------|------------------|---------------------|-----------------|------------------|----------------------|-----------------|------------------|-----------------|-----------------|------------------|--|
| | | | | | | | Solid | | | Liquid | | | Gas | | | Other fossil fuel | | | Peat ⁽¹⁾ | | | | | | Biomass | | | |
| | Solid | Liquid | Gas | Other fossil fuel | Peat | Bio-mass | CO ₂ | CH ₄ | N ₂ O | CO ₂ | CH ₄ | N ₂ O | CO ₂ | CH ₄ | N ₂ O | CO ₂ | CH ₄ | N ₂ O | CO ₂ | CH ₄ | N ₂ O | CO ₂ | CH ₄ | N ₂ O | CO ₂ | CH ₄ | N ₂ O | |
| 1A5 Non-Specified | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A5a Stationary | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A5b Mobile | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A5bi Mobile (aviation component) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A5bii Mobile (water-borne component) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A5biii Mobile (other) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1A5c Multilateral Operation | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Memo items ⁽⁴⁾ | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| International Bunkers | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| International Aviation (International Bunkers) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| International Water-borne Transport (International Bunkers) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Multilateral Operations ⁽⁵⁾ | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

(1) Although peat is not strictly speaking a fossil fuel, the CO₂ emissions from combustion of peat are included in the national emissions as for fossil fuels. See Chapter 1 of Energy Volume, page 1.15.

(2) To be reported as a memo item, and not part of the national inventory.

(3) Report the amount of urea-based additive used and its purity in the documentation box.

(4) Emissions that are not included in the national total should be reported as memo items.

(5) Multilateral operations pursuant to the Charter of the United Nations: including emissions from fuel delivered to the military in the country and delivered to the military of other countries.

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Table 1.3 Energy Background Table: 1B (Updated)

| Category | Activity Data | | | Emissions (Gg) | | | Information item: Amount captured ⁽²⁾ (Gg) |
|---|--|---|-------|-----------------|-----------------|------------------|---|
| | Description | Unit ⁽¹⁾ | Value | CO ₂ | CH ₄ | N ₂ O | CO ₂ |
| 1B Fugitive Emissions from Fuels | | | | | | | |
| 1B1 Solid Fuel | | | | | | | |
| 1B1a Coal Mining and Handling | | | | | | | |
| 1B1ai Underground Mines | coal produced | ktonnes | | | | | |
| 1B1ai1 Mining | coal produced | ktonnes | | | | | |
| 1B1ai2 Post mining Seam Gas Emissions | coal produced | ktonnes | | | | | |
| 1B1ai3 Abandoned Underground Mines | number of mines | number | | | | | |
| 1B1ai4 Flaring of Drained Methane or Conversion of CH ₄ to CO ₂ | gas flared | 10 ⁶ Sm ³ | | | | | |
| 1B1aii Surface Mines | | | | | | | |
| 1B1aii1 Mining | coal produced | ktonnes | | | | | |
| 1B1aii2 Post-mining Seam Gas Emissions | coal produced | ktonnes | | | | | |
| 1B1aii3 Abandoned Surface Mines | Surface area mined | m ² | | | | | |
| 1B1aiii Coal Exploration | augmentation of coal resource | ktonnes | | | | | |
| 1B1b Uncontrolled Combustion, and Burning Coal Dumps | solid fuel combusted | ktonnes | | | | | |
| 1B1c Fuel Transformation | solid fuel transformed | ktonnes | | | | | |
| 1B1ci Charcoal Production | charcoal produced | kg | | | | | |
| 1B1cii Coke Production | coke produced | kg | | | | | |
| 1B1ciii Solid to Solid Fuel Production | wood pellets produced | MJ | | | | | |
| 1B1civ Gasification Transformation | feedstock | TJ | | | | | |
| 1B2 Oil and Natural Gas | | | | | | | |
| 1B2a Oil | | | | | | | |
| 1B2ai Exploration | Oil wells drilled or oil well count, or oil produced | Number, number, 10 ³ m ³ | | | | | |
| 1B2aii Production and Upgrading | oil produced or oil wells | 10 ³ m ³ , number | | | | | |
| 1B2aiii Transport | crude oil transported | 10 ³ m ³ | | | | | |
| 1B2aiv Refining | refinery crude oil throughput | 10 ³ m ³ | | | | | |
| 1B2av Distribution of fuels | amount distributed | 10 ³ m ³ | | | | | |
| 1B2avi Others | | | | | | | |
| 1B2avii Abandoned oil wells | number of abandoned oil wells | number | | | | | |
| 1B2b Natural Gas | | | | | | | |
| 1B2biv Exploration | number wells drilled | Number, number, 10 ⁶ Sm ³ | | | | | |
| 1B2bv Production | gas produced | 10 ⁶ Sm ³ , number | | | | | |
| 1B2bvi Processing | amount of gas processed at facilities | 10 ⁶ Sm ³ | | | | | |
| 1B2bi Transmission and Storage | amount of gas consumed | 10 ⁶ Sm ³ | | | | | |
| 1B2bii Distribution | amount of gas distributed or length of pipeline | 10 ⁶ Sm ³ , kilometers | | | | | |
| 1B2biii Others | | | | | | | |
| 1B2bvii Abandoned gas wells | number of abandoned gas wells | number | | | | | |
| 1B3 Other Emissions from Energy Production | | | | | | | |

(1) The units given here are the most commonly used for respective activity data. For convenience and/or consistency, they can be converted into appropriate energy units.

(2) The amount of CO₂ captured is given for information purposes; it is subtracted in the CO₂ emission columns (net emissions).

| Documentation box: |
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| |

Table 1.4a Energy Background Table: 1C CO₂ Transport, Injection and Storage (Unchanged)

| Category | Activity (Gg) | | Annual mass of fugitive CO ₂ emissions to the atmosphere or sea bed (Gg) ⁽²⁾ |
|---|--|--|--|
| | Annual mass of CO ₂ transported | Annual mass of CO ₂ injected ⁽¹⁾ | |
| 1C1 Transport of CO₂ | | | |
| 1C1a Pipelines | | | |
| 1C1b Ships | | | |
| 1C1c Other (please specify) | | | |
| 1C2 Injection and Storage ⁽³⁾ | | | |
| 1C2a Injection | | | |
| 1C2b Storage | | | |
| 1C3 Other | | | |

(1) Excluding recycled CO₂ for enhanced recovery.

(2) Corrected for baseline background fluxes.

(3) Fugitive emissions during above ground operations such as processing and CO₂ recycling during enhanced oil and gas recovery operations should be reported as fugitive emissions from oil and natural gas and reported under the appropriate categories for that sector.

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Table 1.4b Energy Background Table: 1C CO₂ Transport, Injection and Storage – Overview (Unchanged)

| Category ⁽¹⁾ | CO ₂ (Gg) |
|---|----------------------|
| Total amount captured for storage (A) | |
| Total amount of import for storage (B) | |
| Total amount of export for storage (C) | |
| Total amount of CO ₂ injected at storage sites (D) | |
| Total amount of leakage during transport (E1) category 1C1 | |
| Total amount of leakage during injection (E2) category 1C2a | |
| Total amount of leakage from storage sites (E3) category 1C2b | |
| Total leakage (E4 = E1 + E2 + E3)) | |
| Capture + imports (F = A + B) | |
| Injection + leakage + exports (G = D + E4 + C) | |
| Discrepancy (F – G) | |

(1) Once captured, there is no differentiated treatment between biogenic carbon and fossil carbon. Emissions and storage of both biogenic and fossil carbons will be estimated and reported.

| Documentation box: |
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| |

Table 1.5 Energy Background Table: Reference Approach (1 of 1) (Unchanged)

| Fuel Types | | | Production | Import | Export | Inter-national bunkers | Stock change | Apparent consumption | Conversion factor | Apparent consumption | Carbon emission factor | Carbon content | Carbon content | Excluded carbon | Net carbon emission | Fraction of carbon oxidised | Actual carbon emission | CO ₂ emission |
|----------------------|-----------------|---------------------------|---------------------|--------|--------|------------------------|--------------|----------------------|-------------------|----------------------|------------------------|----------------|----------------|-----------------|---------------------|-----------------------------|------------------------|--------------------------|
| | | | (Unit) | (Unit) | (Unit) | (Unit) | (Unit) | (Unit) | (Unit) | (TJ/Unit) | (TJ) | (tC/TJ) | (t C) | (Gg C) | (Gg C) | (Gg C) | | (Gg C) |
| Liquid Fossil | Primary Fuels | Crude Oil | | | | | | | | | | | | | | | | |
| | | | Orimulsion | | | | | | | | | | | | | | | |
| | | | Natural Gas Liquids | | | | | | | | | | | | | | | |
| | Secondary Fuels | Gasoline | | | | | | | | | | | | | | | | |
| | | | Jet Kerosene | | | | | | | | | | | | | | | |
| | | | Other Kerosene | | | | | | | | | | | | | | | |
| | | | Shale Oil | | | | | | | | | | | | | | | |
| | | | Gas / Diesel Oil | | | | | | | | | | | | | | | |
| | | | Residual Fuel Oil | | | | | | | | | | | | | | | |
| | | | LPG | | | | | | | | | | | | | | | |
| | | | Ethane | | | | | | | | | | | | | | | |
| | | | Naphtha | | | | | | | | | | | | | | | |
| | | | Bitumen | | | | | | | | | | | | | | | |
| | | | Lubricants | | | | | | | | | | | | | | | |
| | | | Petroleum Coke | | | | | | | | | | | | | | | |
| | | | Refinery Feedstocks | | | | | | | | | | | | | | | |
| | | | Other Oil | | | | | | | | | | | | | | | |
| Liquid Fossil Totals | | | | | | | | | | | | | | | | | | |
| Solid Fossil | Primary Fuels | Anthracite ⁽¹⁾ | | | | | | | | | | | | | | | | |
| | | | Coking Coal | | | | | | | | | | | | | | | |
| | | | Other Bit. Coal | | | | | | | | | | | | | | | |
| | | | Sub-bit. Coal | | | | | | | | | | | | | | | |
| | | | Lignite | | | | | | | | | | | | | | | |
| | Secondary Fuels | Oil Shale and Tar Sands | | | | | | | | | | | | | | | | |
| | | BKB & Patent Fuel | | | | | | | | | | | | | | | | |
| | | Coke Oven/Gas Coke | | | | | | | | | | | | | | | | |
| | Coal Tar | | | | | | | | | | | | | | | | | |
| Solid Fossil Totals | | | | | | | | | | | | | | | | | | |
| Gaseous Fossil | | Natural Gas (Dry) | | | | | | | | | | | | | | | | |
| Other Fossil Fuels | | | | | | | | | | | | | | | | | | |
| Peat ⁽²⁾ | | | | | | | | | | | | | | | | | | |
| Total | | | | | | | | | | | | | | | | | | |

(1) If anthracite is not separately available, include with Other Bituminous Coal.

(2) Although peat is not strictly speaking a fossil fuel, the CO₂ emissions from combustion of peat are included in the national emissions as for fossil fuels. See Chapter 1 of Energy Volume, page 1.15.

Second-order Draft

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Table 2 IPPU Sectoral Table (1 of 2) (See Volume 3, Chapter 1, Table 1.1.) (Updated)

| Category | CO ₂ | CH ₄ | N ₂ O | HFCs | PFCs | SF ₆ | NF ₃ | Other halogenated gases with CO ₂ equivalent conversion factors ⁽¹⁾ | Other halogenated gases without CO ₂ equivalent conversion factors ⁽²⁾ | NO _x | CO | NMVOCs | SO ₂ |
|--|-----------------|-----------------|------------------|------|------|-----------------|-----------------|---|--|-----------------|----|--------|-----------------|
| | (Gg) | | | | | | | | | | | | |
| 2 INDUSTRIAL PROCESSES AND PRODUCT USE | | | | | | | | | | | | | |
| 2A Mineral Industry | | | | | | | | | | | | | |
| 2A1 Cement Production | | | | | | | | | | | | | |
| 2A2 Lime Production | | | | | | | | | | | | | |
| 2A3 Glass Production | | | | | | | | | | | | | |
| 2A4 Other Process Uses of Carbonates | | | | | | | | | | | | | |
| 2A4a Ceramics | | | | | | | | | | | | | |
| 2A4b Other Uses of Soda Ash | | | | | | | | | | | | | |
| 2A4c Non Metallurgical Magnesia Production | | | | | | | | | | | | | |
| 2A4d Other (please specify) ⁽³⁾ | | | | | | | | | | | | | |
| 2A5 Other (please specify) ⁽³⁾ | | | | | | | | | | | | | |
| 2B Chemical Industry | | | | | | | | | | | | | |
| 2B1 Ammonia Production | | | | | | | | | | | | | |
| 2B2 Nitric Acid Production | | | | | | | | | | | | | |
| 2B3 Adipic Acid Production | | | | | | | | | | | | | |
| 2B4 Caprolactam, Glyoxal and Glyoxylic Acid Production | | | | | | | | | | | | | |
| 2B5 Carbide Production | | | | | | | | | | | | | |
| 2B6 Titanium Dioxide Production | | | | | | | | | | | | | |
| 2B7 Soda Ash Production | | | | | | | | | | | | | |
| 2B8 Petrochemical and Carbon Black Production | | | | | | | | | | | | | |
| 2B8a Methanol | | | | | | | | | | | | | |
| 2B8b Ethylene | | | | | | | | | | | | | |
| 2B8c Ethylene Dichloride and Vinyl Chloride Monomer | | | | | | | | | | | | | |
| 2B8d Ethylene Oxide | | | | | | | | | | | | | |
| 2B8e Acrylonitrile | | | | | | | | | | | | | |
| 2B8f Carbon Black | | | | | | | | | | | | | |
| 2B9 Fluorochemical Production | | | | | | | | | | | | | |
| 2B9a By-product Emissions ⁽⁴⁾ | | | | | | | | | | | | | |
| 2B9b Fugitive Emissions ⁽⁴⁾ | | | | | | | | | | | | | |
| 2B10 Hydrogen Production | | | | | | | | | | | | | |
| 2B11 Other (please specify) ⁽³⁾ | | | | | | | | | | | | | |

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Second-order Draft

Table 2 IPPU Sectoral Table (2 of 2) (Updated)

| Category | CO ₂ | CH ₄ | N ₂ O | HFCs | PFCs | SF ₆ | NF ₃ | Other halogenated gases with CO ₂ equivalent conversion factors ⁽¹⁾ | Other halogenated gases without CO ₂ equivalent conversion factors ⁽²⁾ | NO _x | CO | NMVOCs | SO ₂ |
|--|-----------------|----------------------------------|------------------|------|------|-----------------|-----------------|---|--|-----------------|----|--------|-----------------|
| | (Gg) | CO ₂ equivalents (Gg) | | | | | | (Gg) | | | | | |
| 2F1b Mobile Air Conditioning | | | | | | | | | | | | | |
| 2F2 Foam Blowing Agents | | | | | | | | | | | | | |
| 2F3 Fire Protection | | | | | | | | | | | | | |
| 2F4 Aerosols | | | | | | | | | | | | | |
| 2F5 Solvents | | | | | | | | | | | | | |
| 2F6 Other Applications ⁽³⁾ | | | | | | | | | | | | | |
| 2G Other Product Manufacture and Use | | | | | | | | | | | | | |
| 2G1 Electrical Equipment | | | | | | | | | | | | | |
| 2G1a Manufacture of Electrical Equipment | | | | | | | | | | | | | |
| 2G1b Use of Electrical Equipment | | | | | | | | | | | | | |
| 2G1c Disposal of Electrical Equipment | | | | | | | | | | | | | |
| 2G2 SF ₆ and PFCs from Other Product Uses | | | | | | | | | | | | | |
| 2G2a Military Applications | | | | | | | | | | | | | |
| 2G2b Accelerators | | | | | | | | | | | | | |
| 2G2c Waterproofing of Electronic Circuits | | | | | | | | | | | | | |
| 2G2d Textile, Carpet, Leather, and Paper Fluorinated Treatment | | | | | | | | | | | | | |
| 2G2e Other (please specify) ⁽³⁾ | | | | | | | | | | | | | |
| 2G3 N ₂ O from Product Uses | | | | | | | | | | | | | |
| 2G3a Medical Applications | | | | | | | | | | | | | |
| 2G3b Propellant for Pressure and Aerosol Products | | | | | | | | | | | | | |
| 2G3c Other (please specify) ⁽³⁾ | | | | | | | | | | | | | |
| 2G4 Other (please specify) ⁽³⁾ | | | | | | | | | | | | | |
| 2H Other | | | | | | | | | | | | | |
| 2H1 Pulp and Paper Industry | | | | | | | | | | | | | |
| 2H2 Food and Beverages Industry | | | | | | | | | | | | | |
| 2H3 Other (please specify) ⁽³⁾ | | | | | | | | | | | | | |

(1) The other halogenated gases for which the CO₂ equivalent conversion factor is not available should not be included in this column. Such gases should be reported in the column "Other halogenated gases without CO₂ equivalent conversion factors".

(2) When this column is used, gases should be listed separately (in IPPU background tables and Table 2.11) and the name of the gas should be given in the documentation box. Insert additional columns if necessary.

(3) Insert additional rows if needed

(4) The "Other halogenated gases" are fluorinated alcohols, fluorinated ethers, NF₃, SF₅CF₃.

(5) Small amounts of CO₂ used as a diluent for SF₆ and emitted during magnesium processing is considered insignificant and is usually counted elsewhere. The "Other halogenated gases" here mainly comprise fluorinated ketones.

(6) Emissions from feedstock uses in petrochemical industry should be addressed in 2B8 (Petrochemical and Carbon Black Production). Emissions from some product uses should be allocated to each industry source category (e.g., CO₂ from carbon anodes and electrodes → 2C (Metal Industry)).

(7) Only NMVOC emissions and no direct GHGs are relevant to this category.

(8) Emissions from asphalt production, and paving of roads and roofing are included here.

(9) "Other halogenated gases" are NF₃, c-C₄F₈O, etc.

(10) The "Other halogenated gases" here include C₄F₉OC₂H₅ (HFE-7200), CHF₂OCF₂OC₂F₄OCHF₂ (H-Galden 1040x), CHF₂OCF₂OCHF₂ (HG-10), etc.

* Cells to report emissions of NO_x, CO, NMVOC and SO₂ have not been shaded although the physical potential for emissions is lacking for some categories.

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**Table 2.1 IPPU Background Table: 2A Mineral Industry,
2B (2B1-2B8, 2B10) Chemical Industry - CO₂, CH₄ and N₂O (Updated)**

| Categories | Activity data | | | Emissions | | | | | | |
|--|---------------------------------|----------|---------------------|--------------------------|---|---------------------------------------|--------------------------|---|--------------------------|---|
| | Production/Consumption quantity | | | CO ₂ (Gg) | | | CH ₄ (Gg) | | N ₂ O (Gg) | |
| | Description ⁽¹⁾ | Quantity | Unit ⁽²⁾ | Emissions ⁽³⁾ | Information item Captured and Stored ⁽⁴⁾ | (memo) Other Reduction ⁽⁵⁾ | Emissions ⁽³⁾ | Information item Reduction ⁽⁶⁾ | Emissions ⁽³⁾ | Information item Reduction ⁽⁶⁾ |
| 2A Mineral Industry | | | | | | | | | | |
| 2A1 Cement production | | | | | | | | | | |
| 2A2 Lime production | | | | | | | | | | |
| 2A3 Glass Production | | | | | | | | | | |
| 2A4 Other Process Uses of Carbonates ⁽⁷⁾ | | | | | | | | | | |
| 2A4a Ceramics | | | | | | | | | | |
| 2A4b Other Uses of Soda Ash | | | | | | | | | | |
| 2A4c Non Metallurgical Magnesia Production | | | | | | | | | | |
| 2A4d Other | | | | | | | | | | |
| 2A5 Other (please specify) ⁽⁸⁾ | | | | | | | | | | |
| 2B Chemical Industry | | | | | | | | | | |
| 2B1 Ammonia Production | | | | | | | | | | |
| 2B2 Nitric Acid Production | | | | | | | | | | |
| 2B3 Adipic Acid Production | | | | | | | | | | |
| 2B4 Caprolactam, Glyoxal and Glyoxylic Acid Production | | | | | | | | | | |
| 2B5 Carbide Production | | | | | | | | | | |
| 2B6 Titanium Dioxide Production | | | | | | | | | | |
| 2B7 Soda Ash Production | | | | | | | | | | |
| 2B8 Petrochemical and Carbon Black Production | | | | | | | | | | |
| 2B8a Methanol | | | | | | | | | | |
| 2B8b Ethylene | | | | | | | | | | |
| 2B8c Ethylene Dichloride and Vinyl Chloride Monomer | | | | | | | | | | |
| 2B8d Ethylene Oxide | | | | | | | | | | |
| 2B8e Acrylonitrile | | | | | | | | | | |
| 2B8f Carbon Black | | | | | | | | | | |
| 2B10 Hydrogen Production | | | | | | | | | | |
| 2B11 Other (please specify) ⁽⁸⁾ | | | | | | | | | | |

(1) Where the options for activity data, e.g., cement or clinker or carbonates for estimating the emissions from Cement Production, specify the activity data used in order to make the choice of emission factor more transparent.

(2) Unit of activity data should be specified.

(3) Enter the reported emissions (adjusted with captured and/or reduced amount).

(4) Where generated CO₂ is captured for injection into a storage, the captured amount should be reported here. These data are provided as the additional information. They are not emissions, therefore should not be included in the national total.

(5) Where reduction of generated CO₂ except for capture and storage occurs (e.g., re-conversion to carbonates) and its amount is available, it should be reported here.

(6) Enter the quantities of reduction of generated gas (emission recovery, destruction, etc.)

(7) Report here only the emissions from carbonate uses not covered in other categories.

(8) Insert additional rows if necessary.

Note: Where information is confidential the entries should provide notation key "C" but there should be a note indicating this in the documentation box below. Also, More specific information could be provided in the documentation box.

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Table 2.2 IPPU Background Table: 2B (2B9 - 2B10) Chemical Industry
HFCs, PFCs, SF₆, NF₃ and other halogenated gases (Updated)

| Categories | | HFC-23 | HFC-32 | HFC-41 | HFC-125 | HFC-134 | HFC-134a | HFC-143 | HFC-143a | HFC-152 | HFC-152a | HFC-161 | HFC-227ea | HFC-236cb | HFC-236ea | HFC-236fa | HFC-245ca | HFC-245fa | HFC-365mfc | HFC-43-10mee | Other HFCs ⁽²⁾ (please specify) | Total HFCs | CF ₄ | C ₂ F ₆ | C ₃ F ₈ | C ₄ F ₁₀ | C ₄ F ₈ (perfluorocyclobuta | (perfluoromethyl cyclopropane) | C ₅ F ₁₂ | C ₆ F ₁₄ | Other PFCs ⁽²⁾ (please specify) | Total PFCs | SF ₆ | NF ₃ | Other halogenated gases ⁽²⁾ (please specify) | | | | | | | | | | | |
|--|---|--|--------|--------|---------|---------|----------|---------|----------|---------|----------|---------|-----------|-----------|-----------|-----------|-----------|-----------|------------|--------------|---|------------|-----------------|-------------------------------|-------------------------------|--------------------------------|--|-----------------------------------|--------------------------------|--------------------------------|---|------------|-----------------|-----------------|--|--|--|--|--|--|--|--|--|--|--|--|
| CO ₂ equivalent conversion factors ⁽¹⁾ [Source of the factor:] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Emissions in original mass unit (tonne) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2B9 | Fluorochemical Production | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2B9a | By-product Emissions ⁽³⁾ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | (information) Reduced amount ⁽⁴⁾ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2B9b | Fugitive Emissions ⁽³⁾ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | (information) Reduced amount ⁽⁴⁾ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2B10 | Other (please specify) ⁽⁵⁾ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Emissions in CO ₂ equivalent unit (Gg-CO ₂) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2B9 | Fluorochemical Production | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2B9a | By-product Emissions | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2B9b | Fugitive Emissions | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2B10 | Other (please specify) ⁽⁵⁾ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

(1) Typically, global warming potential (100 year time horizon) identified in the IPCC Assessment Report can be used. The source of the factors must be specified in the bracket.

(2) Insert additional columns if necessary. The other halogenated gases for which the CO₂ equivalent conversion factor is not available should not be included in this table. Such gases should be reported in Table 2.11 IPPU background table: Greenhouse Gases without CO₂ equivalent conversion factors.

(3) Enter the reported emissions (adjusted with captured and/or reduced amount).

(4) Enter the quantities of reduction of generated gas (emission recovery, destruction, etc.).

(5) Insert additional rows if necessary.

Note: Where information is confidential the entries should provide aggregate figures but there should be a note indicating this in the documentation box below.

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Table 2.3 IPPU Background Table: 2C Metal Industry
CO₂, CH₄ and N₂O (Updated)

| Categories | Activity Data | | | Emissions | | | | | | |
|---|---------------------------------|----------|---------------------|--------------------------|--|--|--------------------------|---|--------------------------|---|
| | Production/Consumption quantity | | | CO ₂ (Gg) | | | CH ₄ (Gg) | | N ₂ O (Gg) | |
| | Description ⁽¹⁾ | Quantity | Unit ⁽²⁾ | Emissions ⁽³⁾ | (information) Captured and Stored ⁽⁴⁾ | (information) Other Reduction ⁽⁵⁾ | Emissions ⁽³⁾ | (information) Reduction ⁽⁶⁾ | Emissions ⁽³⁾ | (information) Reduction ⁽⁶⁾ |
| 2C Metal Industry | | | | | | | | | | |
| 2C1 Iron and Steel Production | | | | | | | | | | |
| 2C2 Ferroalloys Production | | | | | | | | | | |
| 2C3 Aluminium Production | | | | | | | | | | |
| 2C4 Magnesium Production | | | | | | | | | | |
| 2C5 Lead Production | | | | | | | | | | |
| 2C6 Zinc Production | | | | | | | | | | |
| 2C7 Rare Earths Production | | | | | | | | | | |
| 2C8 Other (please specify) ⁽⁷⁾ | | | | | | | | | | |

- (1) Where the options for activity data, e.g. steel production or process materials consumption for estimating the emissions from Iron and Steel Production, specify the activity data used in order to make the choice of emission factor more transparent.
- (2) Unit of activity data should be specified.
- (3) Enter the reported emissions (adjusted with captured and/or reduced amount).
- (4) Where generated CO₂ is captured for injection into a storage, the captured amount should be reported here. These data are provided as the additional information. They are not emissions, therefore should not be included in the national total.
- (5) Where reduction of generated CO₂ except for capture and storage occurs and its amount is available, it should be reported here.
- (6) Enter the quantities of reduction of generated gas (emission recovery, destruction, etc.).
- (7) Insert additional rows if necessary.

Note: Where information is confidential the entries should provide notation key "C" but there should be a note indicating this in the documentation box below. Also, More specific information (e.g. data on virgin and recycled steel production) could be provided in the documentation box.

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**Table 2.4 IPPU Background Table: 2C (2C3, 2C4, 2C7) Metal Industry
HFCs, PFCs, SF₆ and other halogenated
gases (Updated)**

| Categories | HFC-134a | Other HFCs ⁽²⁾ (please specify) | Total HFCs | CF ₄ | C ₂ F ₆ | C ₃ F ₈ | C ₄ F ₁₀ | c-C ₄ F ₈ | C ₅ F ₁₂ | C ₆ F ₁₄ | Other PFCs ⁽²⁾ (please specify) | Total PFCs | SF ₆ | Other halogenated gases ⁽²⁾ (please specify) |
|--|----------|---|------------|-----------------|-------------------------------|-------------------------------|--------------------------------|---------------------------------|--------------------------------|--------------------------------|---|------------|-----------------|--|
| CO₂ equivalent conversion factors ⁽¹⁾ [Source of the factor:] | | | | | | | | | | | | | | |
| Emissions in original mass unit (tonne) | | | | | | | | | | | | | | |
| 2C3 Aluminium Production ⁽³⁾ | | | | | | | | | | | | | | |
| (information) Reduced amount ⁽⁴⁾ | | | | | | | | | | | | | | |
| 2C4 Magnesium Production ⁽³⁾ | | | | | | | | | | | | | | |
| (information) Reduced amount ⁽⁴⁾ | | | | | | | | | | | | | | |
| 2C7 Rare Earths Production | | | | | | | | | | | | | | |
| (information) Reduced amount ⁽⁴⁾ | | | | | | | | | | | | | | |
| 2C7 Other Metals (please specify) ⁽⁵⁾ | | | | | | | | | | | | | | |
| (information) Reduced amount ⁽⁴⁾ | | | | | | | | | | | | | | |
| Emissions in CO₂ equivalent unit (Gg-CO₂) | | | | | | | | | | | | | | |
| 2C3 Aluminium Production | | | | | | | | | | | | | | |
| 2C4 Magnesium Production | | | | | | | | | | | | | | |
| 2C7 Rare Earths Production | | | | | | | | | | | | | | |
| 2C7 Other (please specify) ⁽⁵⁾ | | | | | | | | | | | | | | |

- (1) Typically, global warming potential (100 year time horizon) identified in the IPCC Assessment Report can be used. The source of the factors must be specified in the bracket.
- (2) Insert additional columns if necessary. The other halogenated gases for which the CO₂ equivalent conversion factor is not available should not be included in this table. Such gases should be reported in Table 2.11 IPPU background table: Greenhouse Gases without CO₂ equivalent conversion factors.
- (3) Enter the reported emissions (adjusted with captured and/or reduced amount).
- (4) Enter the quantities of reduction of generated gas (emission recovery, destruction, etc.).
- (5) Insert additional rows if necessary.

Note: Where information is confidential the entries should provide aggregate figures but there should be a note indicating this in the documentation box below.

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Table 2.5 IPPU Background Table: 2D Non-Energy Products from Fuels and Solvent Use
CO₂, CH₄ and N₂O (Unchanged)

| Categories | Activity Data | | | Emissions | | |
|--|---------------------------------|----------|-------|-----------------|-----------------|------------------|
| | Production/Consumption quantity | | | CO ₂ | CH ₄ | N ₂ O |
| | Description | Quantity | Unit | (Gg) | (Gg) | (Gg) |
| 2D Non-Energy Products from Fuels and Solvent Use | | | | | | |
| 2D1 Lubricant Use | Lubricant consumption | | tonne | | | |
| 2D2 Paraffin Wax Use | Wax consumption | | tonne | | | |
| 2D3 Solvent Use | | | | | | |
| 2D4 Other | | | | | | |
| Product (please specify) | | | | | | |
| Product (please specify) | | | | | | |
| Product (please specify) ⁽¹⁾ | | | | | | |

(1) Insert additional rows if necessary.

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Table 2.6 IPPU Background Table: 2E Electronics Industry
HFCs, PFCs, SF₆ NF₃ and other halogenated gases
(Unchanged))

| Categories | CO ₂ ⁽²⁾ | N ₂ O ⁽²⁾ | HFC-23 | HFC-32 | Other HFCs ⁽³⁾ (please specify) | Total HFCs | CF ₄ | C ₂ F ₆ | C ₃ F ₈ | c-C ₄ F ₈ | Other PFCs ⁽³⁾ (please specify) | Total PFCs | SF ₆ | NF ₃ | Other halogenated gases ⁽³⁾ (please specify) |
|--|--------------------------------|---------------------------------|--------|--------|---|------------|-----------------|-------------------------------|-------------------------------|---------------------------------|---|------------|-----------------|-----------------|--|
| CO ₂ equivalent conversion factors ⁽¹⁾ [Source of the factor:] | | | | | | | | | | | | | | | |
| Emissions in original mass unit (tonne) | | | | | | | | | | | | | | | |
| 2E Electronics Industry | | | | | | | | | | | | | | | |
| 2E1 Integrated Circuit or Semiconductor | | | | | | | | | | | | | | | |
| 2E2 TFT Flat Panel Display | | | | | | | | | | | | | | | |
| 2E3 Photovoltaics | | | | | | | | | | | | | | | |
| 2E4 Heat Transfer Fluid | | | | | | | | | | | | | | | |
| 2E5 Other (please specify) ⁽⁴⁾ | | | | | | | | | | | | | | | |
| Emissions in CO₂ equivalent unit (Gg-CO₂) | | | | | | | | | | | | | | | |
| 2E Electronics Industry | | | | | | | | | | | | | | | |
| 2E1 Integrated Circuit or Semiconductor | | | | | | | | | | | | | | | |
| 2E2 TFT Flat Panel Display | | | | | | | | | | | | | | | |
| 2E3 Photovoltaics | | | | | | | | | | | | | | | |
| 2E4 Heat Transfer Fluid | | | | | | | | | | | | | | | |
| 2E5 Other (please specify) ⁽³⁾ | | | | | | | | | | | | | | | |

(1) Typically, global warming potential (100 year time horizon) identified in the IPCC Assessment Report can be used. The source of the factors must be specified in the bracket.

(2) Emissions may occur but no methodological guidance is provided in these Guidelines.

(3) Insert additional columns if necessary. The other halogenated gases for which the CO₂ equivalent conversion factor is not available should not be included in this table. Such gases should be reported in Table 2.11 IPPU background table: Greenhouse gases without CO₂ equivalent conversion factors.

(4) Insert additional rows if necessary.

Note: Where information is confidential the entries should provide aggregate figures but there should be a note indicating this in the documentation box below.

Documentation box:

**Table 2.7 IPPU Background Table: 2F Product Uses as Substitutes for Ozone Depleting Substances
HFCs, PFCs and other halogenated gases
(Updated)**

| Categories | CO ₂ ⁽²⁾ | HFC-23 | HFC-32 | HFC-125 | HFC-134a | HFC-143a | HFC-152a | HFC-227ea | HFC-236fa | HFC-245fa | HFC-365mfc | HFC-43-10mee | Other HFCs ⁽³⁾ (please specify) | Total HFCs | CF ₄ | C ₂ F ₆ | C ₃ F ₈ | C ₄ F ₁₀ | Other PFCs ⁽³⁾ (please specify) | Total PFCs | Other halogenated gases ⁽³⁾ (please specify) |
|--|--------------------------------|--------|--------|---------|----------|----------|----------|-----------|-----------|-----------|------------|--------------|---|------------|-----------------|-------------------------------|-------------------------------|--------------------------------|---|------------|---|
| CO ₂ equivalent conversion factors ⁽¹⁾ [Source of the factor:] | | | | | | | | | | | | | | | | | | | | | |
| Emissions in original mass unit (tonne) | | | | | | | | | | | | | | | | | | | | | |
| 2F Product Uses as Substitutes for Ozone Depleting Substances | | | | | | | | | | | | | | | | | | | | | |
| 2F1 Refrigeration and Air Conditioning | | | | | | | | | | | | | | | | | | | | | |
| 2F1a Refrigeration and Stationary Air Conditioning | | | | | | | | | | | | | | | | | | | | | |
| 2F1b Mobile Air Conditioning | | | | | | | | | | | | | | | | | | | | | |
| 2F2 Foam Blowing Agents | | | | | | | | | | | | | | | | | | | | | |
| 2F3 Fire Protection | | | | | | | | | | | | | | | | | | | | | |
| 2F4 Aerosols | | | | | | | | | | | | | | | | | | | | | |
| 2F5 Solvents | | | | | | | | | | | | | | | | | | | | | |
| 2F6 Other Applications ⁽⁴⁾ | | | | | | | | | | | | | | | | | | | | | |
| Emissions in CO₂ equivalent unit (Gg-CO₂) | | | | | | | | | | | | | | | | | | | | | |
| 2F Product Uses as Substitutes for Ozone Depleting Substances | | | | | | | | | | | | | | | | | | | | | |
| 2F1 Refrigeration and Air Conditioning | | | | | | | | | | | | | | | | | | | | | |
| 2F1a Refrigeration and Stationary Air Conditioning | | | | | | | | | | | | | | | | | | | | | |
| 2F1b Mobile Air Conditioning | | | | | | | | | | | | | | | | | | | | | |
| 2F2 Foam Blowing Agents | | | | | | | | | | | | | | | | | | | | | |
| 2F3 Fire Protection | | | | | | | | | | | | | | | | | | | | | |
| 2F4 Aerosol | | | | | | | | | | | | | | | | | | | | | |
| 2F5 Solvents | | | | | | | | | | | | | | | | | | | | | |
| 2F6 Other Applications ⁽⁴⁾ | | | | | | | | | | | | | | | | | | | | | |

(1) Typically, global warming potential (100 year time horizon) identified in the IPCC Assessment Report can be used. The source of the factors must be specified in the bracket.

(2) Emissions may occur but no methodological guidance is provided in these Guidelines.

(3) Insert additional columns if necessary. For example, additional halogenated compounds with GWPs include HFC-1234yf, HFC-1234ze(E), and HCFC-1233zd(E). The other halogenated gases for which the CO₂ equivalent conversion factor is not available should not be included in this table. Such gases should be reported in Table 2.11 IPPU background table: Greenhouse gases without CO₂ equivalent conversion factors.

(4) Insert additional rows if necessary.

Note: Where information is confidential the entries should provide aggregate figures but there should be a note indicating this in the documentation box below.

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Table 2.8 IPPU Background Table: 2G (2G1, 2G2, 2G4) Other Product Manufacture and Use – PFCs, SF₆ and other halogenated gases (Updated)

| Categories | CF ₄ | C ₂ F ₆ | C ₃ F ₈ | C ₄ F ₁₀ | c-C ₄ F ₈ | C ₅ F ₁₂ | C ₆ F ₁₄ | Other PFCs ⁽²⁾ (please specify) | Total PFCs | HFC-23 | SF ₆ | Other halogenated gases ⁽²⁾ (please specify) |
|---|-----------------|-------------------------------|-------------------------------|--------------------------------|---------------------------------|--------------------------------|--------------------------------|---|------------|--------|-----------------|--|
| CO₂ equivalent conversion factors⁽¹⁾ [Source of the factor:] | | | | | | | | | | | | |
| Emissions in original mass unit (tonne) | | | | | | | | | | | | |
| 2G Other Product Manufacture and Use | | | | | | | | | | | | |
| 2G1 Electrical Equipment | | | | | | | | | | | | |
| 2G1a Manufacture of Electrical Equipment ⁽³⁾ | | | | | | | | | | | | |
| (information) Reduced amount ⁽⁴⁾ | | | | | | | | | | | | |
| 2G1b Use of Electrical Equipment ⁽³⁾ | | | | | | | | | | | | |
| (information) Reduced amount ⁽⁴⁾ | | | | | | | | | | | | |
| 2G1c Disposal of Electrical Equipment ⁽³⁾ | | | | | | | | | | | | |
| (information) Reduced amount ⁽⁴⁾ | | | | | | | | | | | | |
| 2G2 SF ₆ and PFCs from Other Product Uses | | | | | | | | | | | | |
| 2G2a Military Applications ⁽³⁾ | | | | | | | | | | | | |
| (information) Reduced amount ⁽⁴⁾ | | | | | | | | | | | | |
| 2G2b Accelerators ⁽³⁾ | | | | | | | | | | | | |
| University and Research Particle Accelerators ⁽³⁾ | | | | | | | | | | | | |
| (information) Reduced amount ⁽⁴⁾ | | | | | | | | | | | | |
| Industrial and Medical Particle Accelerators ⁽³⁾ | | | | | | | | | | | | |
| (information) Reduced amount ⁽⁴⁾ | | | | | | | | | | | | |
| 2G2c Waterproofing of Electronic Circuits | | | | | | | | | | | | |
| (information) Reduced amount ⁽⁴⁾ | | | | | | | | | | | | |
| 2G2d Textile, Carpet, Leather, and Paper Fluorinated Treatment | | | | | | | | | | | | |
| (information) Reduced amount ⁽⁴⁾ | | | | | | | | | | | | |
| 2G2e Other (please specify) ^{(3), (5)} | | | | | | | | | | | | |
| (information) Reduced amount ^{(4), (5)} | | | | | | | | | | | | |
| 2G4 Other (please specify) ^{(3), (5), (6)} | | | | | | | | | | | | |
| (information) Reduced amount ^{(4), (5), (6)} | | | | | | | | | | | | |
| Emissions in CO₂ equivalent unit (Gg-CO₂) | | | | | | | | | | | | |
| 2G Other Product Manufacture and Use | | | | | | | | | | | | |
| 2G1 Electrical Equipment | | | | | | | | | | | | |
| 2G1a Manufacture of Electrical Equipment | | | | | | | | | | | | |
| 2G1b Use of Electrical Equipment | | | | | | | | | | | | |
| 2G1c Disposal of Electrical Equipment | | | | | | | | | | | | |
| 2G2 SF ₆ and PFCs from Other Product Uses | | | | | | | | | | | | |
| 2G2a Military Applications (AWACS) | | | | | | | | | | | | |
| 2G2b Accelerators | | | | | | | | | | | | |
| University and Research Particle Accelerators | | | | | | | | | | | | |
| Industrial and Medical Particle Accelerators | | | | | | | | | | | | |
| 2G2c Waterproofing of Electronic Circuits | | | | | | | | | | | | |
| 2G2d Textile, Carpet, Leather, and Paper Fluorinated Treatment | | | | | | | | | | | | |
| 2G2e Other (please specify) ⁽⁵⁾ | | | | | | | | | | | | |
| 2G4 Other (please specify) ^{(5), (6)} | | | | | | | | | | | | |

(1) Typically, global warming potential (100 year time horizon) identified in the IPCC Assessment Report can be used. The source of the factors must be specified in the bracket.

(2) Insert additional columns if necessary. The other halogenated gases for which the CO₂ equivalent conversion factor is not available should not be included in this table. Such gases should be reported in Table 2.11 IPPU background table: Greenhouse gases without CO₂ equivalent conversion factors.

(3) Enter the reported emissions (adjusted with captured and/or reduced amount).

(4) Enter the quantities of reduction of generated gas (emission recovery, destruction, etc.)

(5) Insert additional rows if necessary.

(6) If HFCs with CO₂ equivalent conversion factor are estimated, include them in the column for “Other halogenated gases”.

Note: Where information is confidential the entries should provide aggregate figures but there should be a note indicating this in the documentation box below.

| Documentation box: |
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Table 2.9 IPPU Background Table: 2G (2G3, 2G4) Other Product Manufacture and Use - N₂O, CO₂, CH₄ (Unchanged0

| Categories | Activity Data | | | Emissions | | | | | |
|---|---------------------------|----------|-------|--------------------------|--|--------------------------|--|--------------------------|--|
| | | | | N ₂ O (Gg) | | CO ₂ (Gg) | | CH ₄ (Gg) | |
| | Description | Quantity | Unit | Emissions ⁽¹⁾ | (information) Reduction ⁽²⁾ | Emissions ⁽¹⁾ | (information) Reduction ⁽²⁾ | Emissions ⁽¹⁾ | (information) Reduction ⁽²⁾ |
| 2G3 N₂O from Product Uses | | | | | | | | | |
| 2G3a Medical Applications | N ₂ O supplied | | tonne | | | | | | |
| 2G3b Propellant for Pressure and Aerosol Products | N ₂ O supplied | | tonne | | | | | | |
| 2G3c Other (please specify) ⁽³⁾ | N ₂ O supplied | | tonne | | | | | | |
| 2G4 Other (please specify) ⁽³⁾ | | | | | | | | | |

- (1) Enter the reported emissions (adjusted with captured and/or reduced amount).
 (2) Enter the quantities of reduction of generated gas (emission recovery, destruction, etc.)
 (3) Insert additional rows if necessary.

| |
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| Documentation box: |
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Table 2.10 IPPU Background Table: 2H Other (Unchanged)

| Categories | Activity Data | | Emissions | | | | | |
|---|---------------|------|--------------------------|--|--------------------------|--|--------------------------|--|
| | | | CO ₂ (Gg) | | CH ₄ (Gg) | | N ₂ O (Gg) | |
| | Quantity | Unit | Emissions ⁽¹⁾ | (information) Reduction ⁽²⁾ | Emissions ⁽¹⁾ | (information) Reduction ⁽²⁾ | Emissions ⁽¹⁾ | (information) Reduction ⁽²⁾ |
| 2H Other | | | | | | | | |
| 2H1 Pulp and Paper Industry | | | | | | | | |
| 2H2 Food and Beverages Industry | | | | | | | | |
| 2H3 Other (please specify) ⁽³⁾ | | | | | | | | |

(1) Enter the reported emissions (adjusted with captured and/or reduced amount).

(2) Enter the quantities of reduction of generated gas (emission recovery, destruction, etc.).

(3) Insert additional rows if necessary.

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| Documentation box: |
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Table 2.11 IPPU Background Table: Greenhouse gases without CO₂ equivalent conversion factors (Unchanged)

| Categories | (please specify) | (please specify) | (please specify) | (please specify) | (please specify) ⁽¹⁾ |
|--|------------------|------------------|------------------|------------------|---------------------------------|
| Emissions in original mass unit (tonne) | | | | | |
| Total | | | | | |
| 2B Chemical Industry | | | | | |
| 2B9 Fluorochemical Production | | | | | |
| 2B9a By-product Emissions | | | | | |
| 2B9b Fugitive Emissions | | | | | |
| 2B10 Other (please specify) ⁽²⁾ | | | | | |
| 2C Metal Industry | | | | | |
| 2C4 Magnesium Production | | | | | |
| 2C7 Other (please specify) ⁽²⁾ | | | | | |
| 2E Electronics Industry | | | | | |
| 2E1 Integrated Circuit or Semiconductor | | | | | |
| 2E2 TFT Flat Panel Display | | | | | |
| 2E3 Photovoltaics | | | | | |
| 2E4 Heat Transfer Fluid | | | | | |
| 2E5 Other (please specify) ⁽²⁾ | | | | | |
| 2F Product Uses as Substitutes for Ozone Depleting Substances | | | | | |
| 2F1 Refrigeration and Air Conditioning | | | | | |
| 2F1a Refrigeration and Stationary Air Conditioning | | | | | |
| 2F1b Mobile Air Conditioning | | | | | |
| 2F2 Foam Blowing Agents | | | | | |
| 2F3 Fire Protection | | | | | |
| 2F4 Aerosols | | | | | |
| 2F5 Solvents | | | | | |
| 2F6 Other Applications (please specify) ⁽²⁾ | | | | | |
| 2G. Other Product Uses | | | | | |
| 2G1 Electrical Equipment | | | | | |
| 2G1a Manufacture of Electrical Equipment | | | | | |
| 2G1b Use of Electrical Equipment | | | | | |
| 2G1c Disposal of Electrical Equipment | | | | | |
| 2G2 SF ₆ and PFCs from Other Product Uses | | | | | |
| 2G2a Military Applications (AWACS) | | | | | |
| 2G2b Accelerators | | | | | |
| 2G2c Other (please specify) ⁽²⁾ | | | | | |
| 2G4 Other (please specify) ⁽²⁾ | | | | | |

(1) Insert additional columns if necessary. The gases for which the CO₂ equivalent conversion factor is available should not be included in this table. Such gases should be reported in the respective sectoral background tables and included in national totals.

(2) Insert additional rows if necessary.

Note: Where information is confidential the entries should provide aggregate figures but there should be a note indicating this in the documentation box below.

Documentation box:

Table 2.12 IPPU Background Table: Allocation of CO₂ emissions from Non-Energy Use of fossil fuels: IPPU and other sectors [See also section 1.4 of Volume 3.] (Unchanged)

| Category | Reported in year: | | | | Notes |
|---|---------------------------------|---------------------------------------|--|--|-------|
| | Primary NEU fuel ⁽¹⁾ | Other NEU fuel(s) ⁽¹⁾ | Emissions Amount Reported in IPPU Sector CO ₂ ⁽²⁾ (Gg) | In case reported elsewhere: Sub-category in 1A where these emissions are (partly) reported | |
| 2 Industrial Processes and Product Use | | | | | |
| 2A Mineral Industry | | | | | |
| (Please specify the sub-category) | (coal, ..) | | | | 4 |
| 2B Chemical Industry | | | | | |
| 2B1 Ammonia Production | natural gas | oil, coal | | | |
| 2B5 Carbide Production | pet coke | oil | | | |
| 2B6 Titanium Dioxide Production | coal | | | | |
| 2B8 Petrochemical and Carbon Black Production | | | | | |
| 2B8a Methanol | natural gas | coal, oil | | | 5 |
| 2B8b Ethylene | naphtha | gas oil; butane, ethane, propane, LPG | | | 5 |
| 2B8f Carbon Black | natural gas | oil, coke oven gas | | | |
| 2B10 Other | | | | | |
| 2C Metal Industry | | | | | |
| 2C1 Iron and Steel Production | coke | coal, pet coke (carbon electrode) | | | 6 |
| 2C2 Ferroalloys Production | (carbon electrode) | coke, coal | | | 7 |
| 2C3 Aluminium Production | (carbon electrode) | coke, coal | | | 7 |
| 2C5 Lead Production | coke | | | | |
| 2C6 Zinc Production | coke | | | | |
| 2C7 Other | (carbon electrode) | coke, coal | | | |
| 2D Non-Energy Products from Fuels and Solvent Use | | | | | |
| 2D1 Lubricant Use | lubricants | greases | | | |
| 2D2 Paraffin Wax Use | waxes | | | | |
| 2D3 Solvent Use | (mineral turpentine) | coal tars and oils | | | 8 |
| 2D4 Other | | | | | 9 |
| 2H Other | | | | | |
| 2H1 Pulp and Paper Industry | | | | | |
| 2H2 Food and Beverages Industry | coke | | | | |
| 2H3 Other | | | | | |
| 1 ENERGY | | | | | |
| 1A Fuel Combustion Activities | | | Reported in Sector 1A ⁽³⁾ | | |
| 1A1a Main Activity Electricity and Heat Production | (BF gas) | (chemical off-gases) | | | 10 |
| 1A1b Petroleum Refining | | | | | |
| 1A1c Manufacture of Solid Fuels and Other Energy Industries | BF gas | | | | |
| 1A2 Manufacturing Industries and Construction | (BF gas) | (lubricants, chemical off-gases)) | | | |

- (1) The columns 'Primary NEU fuel' and 'Other NEU fuel' should be completed with the actual fuel types used.
- (2) These are the same emissions reported in the sectoral background table (also the same emissions notation keys NE, NO, IE, where applicable). If (partly) reported elsewhere, a reference to that other source category should be added in the next column.
- (3) Report here only the CO₂ emissions from combustion of waste gases produced from industrial processes but used for fuel combustion in other economic sectors and reported in the Energy sector.(e.g. from combustion of blast furnace gas or chemical off-gases transferred offsite to another source category).
- (4) For example powdered anthracite coal may be used in Glass Production (2A3).
- (5) In cases where the production of off-gases (i.e. byproduct gases) is fully accounted for in the energy statistics, the combustion of these gases may be used to calculate and report CO₂ emissions from the feedstock losses. Part of these off-gases may be combusted off-site (i.e. in a sector other than the petrochemical industry) and should thus be accounted for separately as fuel combustion in the Energy Sector.
- (6) Part of the blast furnace gas produced from coke used in blast furnaces may be combusted off-site (i.e. in a sector other than the iron and steel industry) and should thus be accounted for separately as fuel combustion in the Energy Sector.
- (7) Carbon electrodes are generally manufactured from coke, coal or tar either on-site by the users themselves or separately by anode production plants and then sold to users domestically and/or exported. If anodes are also imported and/or exported, there is no direct correspondence between fuels used for anode production and the amounts of anodes used in the country.

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- (8) Mineral turpentine are often used as solvent, possibly blended with other liquids. Aromatics derived from coal oils may also be used as solvents.
- (9) Emissions from asphalt production, paving of roads and roofing should be reported under 2D4. However, bitumen - and other oil as diluent or 'road oil' - used for this activity does not result in CO₂ emissions.
- (10) CO₂ from blast furnace gas and chemical off-gases should be reported here only when utilised in public power or heat production.

Documentation box:

Table 3 AFOLU Sectoral Table (1 of 2) (Unchanged)

| Categories | | Net CO ₂ emissions/ removals | Emissions | | | | |
|---|--|---|-----------------|------------------|-----------------|----|--------|
| | | | CH ₄ | N ₂ O | NO _x | CO | NMVOCs |
| | | | | | | | |
| 3 AFOLU | | | | | | | |
| 3A Livestock | | | | | | | |
| 3A1 Enteric Fermentation | | | | | | | |
| 3A1a Cattle | | | | | | | |
| 3A1ai Dairy Cows | | | | | | | |
| 3A1aii Other Cattle | | | | | | | |
| 3A1b Buffalo | | | | | | | |
| 3A1c Sheep | | | | | | | |
| 3A1d Goats | | | | | | | |
| 3A1e Camels | | | | | | | |
| 3A1f Horses | | | | | | | |
| 3A1g Mules and Asses | | | | | | | |
| 3A1h Swine | | | | | | | |
| 3A1j Other (please specify) | | | | | | | |
| 3A2 Manure Management ⁽¹⁾ | | | | | | | |
| 3A2a Cattle | | | | | | | |
| 3A2ai Dairy Cows | | | | | | | |
| 3A2aii Other Cattle | | | | | | | |
| 3A2b Buffalo | | | | | | | |
| 3A2c Sheep | | | | | | | |
| 3A2d Goats | | | | | | | |
| 3A2e Camels | | | | | | | |
| 3A2f Horses | | | | | | | |
| 3A2g Mules and Asses | | | | | | | |
| 3A2h Swine | | | | | | | |
| 3A2i Poultry | | | | | | | |
| 3A2j Other (please specify) | | | | | | | |
| 3B Land | | | | | | | |
| 3B1 Forest Land | | | | | | | |
| 3B1a Forest Land Remaining Forest Land | | | | | | | |
| 3B1b Land Converted to Forest Land | | | | | | | |
| 3B1bi Cropland Converted to Forest Land | | | | | | | |
| 3B1bii Grassland Converted to Forest Land | | | | | | | |
| 3B1biii Wetlands Converted to Forest Land | | | | | | | |
| 3B1biv Settlements Converted to Forest Land | | | | | | | |
| 3B1bv Other Land Converted to Forest Land | | | | | | | |
| 3B2 Cropland | | | | | | | |
| 3B2a Cropland Remaining Cropland | | | | | | | |
| 3B2b Land Converted to Cropland | | | | | | | |
| 3B2bi Forest Land Converted to Cropland | | | | | | | |
| 3B2bii Grassland Converted to Cropland | | | | | | | |
| 3B2biii Wetlands Converted to Cropland | | | | | | | |
| 3B2biv Settlements Converted to Cropland | | | | | | | |
| 3B2bv Other Land Converted to Cropland | | | | | | | |
| 3B3 Grassland | | | | | | | |
| 3B3a Grassland Remaining Grassland | | | | | | | |
| 3B3b Land Converted to Grassland | | | | | | | |
| 3B3bi Forest Land Converted to Grassland | | | | | | | |
| 3B3bii Cropland Converted to Grassland | | | | | | | |
| 3B3biii Wetlands Converted to Grassland | | | | | | | |
| 3B3biv Settlements Converted to Grassland | | | | | | | |
| 3B3bv Other Land Converted to Grassland | | | | | | | |

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Table 3 AFOLU Sectoral Table (2 of 2) (Unchanged)

| Categories | Net CO ₂ emissions/ removals | Emissions | | | | |
|---|---|-----------------|------------------|-----------------|----|--------|
| | | CH ₄ | N ₂ O | NO _x | CO | NMVOCS |
| | | (Gg) | | | | |
| 3B4 Wetlands | | | | | | |
| 3B4a Wetlands Remaining Wetlands | | | | | | |
| 3B4ai Peatlands Remaining Peatlands | | | | | | |
| 3B4aii Flooded Land Remaining Flooded Land | | | | | | |
| 3B4b Land Converted to Wetlands | | | | | | |
| 3B4bi Land Converted for Peat Extraction | | | | | | |
| 3B4bii Land Converted to Flooded Land | | | | | | |
| 3B4biii Land Converted to Other Wetlands | | | | | | |
| 3B5 3B5 Settlements | | | | | | |
| 3B5a Settlements Remaining Settlements | | | | | | |
| 3B5b Land Converted to Settlements | | | | | | |
| 3B5bi Forest Land Converted to Settlements | | | | | | |
| 3B5bii Cropland Converted to Settlements | | | | | | |
| 3B5biii Grassland Converted to Settlements | | | | | | |
| 3B5biv Wetlands Converted to Settlements | | | | | | |
| 3B5bv Other Land Converted to Settlements | | | | | | |
| 3B6 3B6 Other Land | | | | | | |
| 3B6a Other Land Remaining Other Land | | | | | | |
| 3B6b Land Converted to Other Land | | | | | | |
| 3B6bi Forest Land Converted to Other Land | | | | | | |
| 3B6bii Cropland Converted to Other Land | | | | | | |
| 3B6biii Grassland Converted to Other Land | | | | | | |
| 3B6biv Wetlands Converted to Other Land | | | | | | |
| 3B6bv Settlements Converted to Other Land | | | | | | |
| 3C Aggregate Sources and Non-CO₂ Emissions Sources on Land ⁽²⁾ | | | | | | |
| 3C1 Biomass Burning | | | | | | |
| 3C1a Biomass Burning in Forest Land | | | | | | |
| 3C1b Biomass Burning in Cropland | | | | | | |
| 3C1c Biomass Burnings in Grassland | | | | | | |
| 3C1d Biomass Burnings in All Other Land | | | | | | |
| 3C2 Liming | | | | | | |
| 3C3 Urea Fertilization | | | | | | |
| 3C4 Direct N₂O Emissions from Managed Soils ⁽³⁾ | | | | | | |
| 3C5 Indirect N₂O Emissions from Managed Soils | | | | | | |
| 3C6 Indirect N₂O Emissions from Manure Management | | | | | | |
| 3C7 Rice Cultivations | | | | | | |
| 3C8 Other (please specify) | | | | | | |
| 3D Other | | | | | | |
| 3D1 Harvested Wood Products | | | | | | |
| 3D2 Other (please specify) | | | | | | |

(1) Indirect N₂O emissions are not included here (see category 3C6).(2) If CO₂ emissions from Biomass Burning are not already included in Table 3.2 (Carbon stock changes background table), they should be reported here.

(3) Countries may report by land categories if they have the information.

* Cells to report emissions of NO_x, CO, and NMVOC have not been shaded although the physical potential for emissions is lacking for some categories.**Documentation box:**

Table 3.1 AFOLU Background Table: 3A1 - 3A2 Agriculture/Livestock (Unchanged)

| Categories | Activity data (number of animals) | Emissions | |
|---|--------------------------------------|-----------------|------------------|
| | | CH ₄ | N ₂ O |
| | | (Gg) | |
| 3A Livestock | | | |
| 3A1 Enteric Fermentation | | | |
| 3A1a Cattle | | | |
| 3A1ai Dairy Cows | | | |
| 3A1aii Other Cattle | | | |
| 3A1b Buffalo | | | |
| 3A1c Sheep | | | |
| 3A1d Goats | | | |
| 3A1e Camels | | | |
| 3A1f Horses | | | |
| 3A1g Mules and Asses | | | |
| 3A1h Swine | | | |
| 3A1j Other (please specify) | | | |
| 3A2 Manure Management ⁽¹⁾ | | | |
| 3A2a Cattle | | | |
| 3A2ai Dairy Cows | | | |
| 3A2aii Other Cattle | | | |
| 3A2b Buffalo | | | |
| 3A2c Sheep | | | |
| 3A2d Goats | | | |
| 3A2e Camels | | | |
| 3A2f Horses | | | |
| 3A2g Mules and Asses | | | |
| 3A2h Swine | | | |
| 3A2i Poultry | | | |
| 3A2j Other (please specify) | | | |

(1) Indirect N₂O emissions are not included here.

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Table 3.2 AFOLU Background Table: 3B Carbon stock changes in FOLU (1 of 2) (Unchanged)

| Categories | Activity data | | Net carbon stock change and CO ₂ emissions | | | | | | | | | Net CO ₂ emissions |
|---|---------------|--------------------------------|---|----------|--|-------------------------|-------------------------|--|-------------------------|---|--|-------------------------------|
| | Total area | Thereof: Area of organic soils | Biomass | | | | Dead organic matter | | | Soils | | |
| | | | Increase | Decrease | Carbon emitted as CH ₄ and CO from fires ⁽¹⁾ | Net carbon stock change | Net carbon stock change | Carbon emitted as CH ₄ and CO from fires ⁽¹⁾ | Net carbon stock change | Net carbon stock change in mineral soils ⁽²⁾ | Carbon loss from drained organic soils | |
| | (ha) | (Gg C) | | | | | | | | | (Gg CO ₂) | |
| 3B Land | | | | | | | | | | | | |
| 3B1 Forest Land | | | | | | | | | | | | |
| 3B1a Forest Land Remaining Forest Land | | | | | | | | | | | | |
| 3B1b Land Converted to Forest Land | | | | | | | | | | | | |
| 3B1bi Cropland Converted to Forest Land | | | | | | | | | | | | |
| 3B1bii Grassland Converted to Forest Land | | | | | | | | | | | | |
| 3B1biii Wetlands Converted to Forest Land | | | | | | | | | | | | |
| 3B1biv Settlements Converted to Forest Land | | | | | | | | | | | | |
| 3B1bv Other Land Converted to Forest Land | | | | | | | | | | | | |
| 3B2 Cropland | | | | | | | | | | | | |
| 3B2a Cropland Remaining Cropland | | | | | | | | | | | | |
| 3B2b Land Converted to Cropland | | | | | | | | | | | | |
| 3B2bi Forest Land Converted to Cropland | | | | | | | | | | | | |
| 3B2bii Grassland Converted to Cropland | | | | | | | | | | | | |
| 3B2biii Wetlands Converted to Cropland | | | | | | | | | | | | |
| 3B2biv Settlements Converted to Cropland | | | | | | | | | | | | |
| 3B2bv Other Land Converted to Cropland | | | | | | | | | | | | |
| 3B3 Grassland | | | | | | | | | | | | |
| 3B3a Grassland Remaining Grassland | | | | | | | | | | | | |
| 3B3b Land Converted to Grassland | | | | | | | | | | | | |
| 3B3bi Forest Land Converted to Grassland | | | | | | | | | | | | |
| 3B3bii Cropland Converted to Grassland | | | | | | | | | | | | |
| 3B3biii Wetlands Converted to Grassland | | | | | | | | | | | | |
| 3B3biv Settlements Converted to Grassland | | | | | | | | | | | | |
| 3B3bv Other Land Converted to Grassland | | | | | | | | | | | | |
| 3B4 Wetlands ⁽³⁾ | | | | | | | | | | | | |
| 3B5 Settlements | | | | | | | | | | | | |

Table 3.2 AFOLU Background Table: 3B Carbon stock changes in FOLU (2of 2) (Unchanged)

| Categories | Activity data | | Net carbon stock change and CO ₂ emissions | | | | | | | | | | Net CO ₂ emissions |
|------------|--------------------------------------|--------------------------------|---|----------|--|-------------------------|-------------------------|--|-------------------------|---|--|-----------------------|-------------------------------|
| | Total area | Thereof: Area of organic soils | Biomass | | | | Dead organic matter | | | Soils | | | |
| | | | Increase | Decrease | Carbon emitted as CH ₄ and CO from fires ⁽¹⁾ | Net carbon stock change | Net carbon stock change | Carbon emitted as CH ₄ and CO from fires ⁽¹⁾ | Net carbon stock change | Net carbon stock change in mineral soils ⁽²⁾ | Carbon loss from drained organic soils | | |
| | (ha) | (Gg C) | | | | | | | | | | (Gg CO ₂) | |
| 3B5a | Settlements Remaining Settlements | | | | | | | | | | | | |
| 3B5b | Land Converted to Settlements | | | | | | | | | | | | |
| 3B5bi | Forest Land Converted to Settlements | | | | | | | | | | | | |
| 3B5bii | Cropland Converted to Settlements | | | | | | | | | | | | |
| 3B5biii | Grassland Converted to Settlements | | | | | | | | | | | | |
| 3B5biv | Wetlands Converted to Settlements | | | | | | | | | | | | |
| 3B5bv | Other Land Converted to Settlements | | | | | | | | | | | | |
| 3B6 | Other Land | | | | | | | | | | | | |
| 3B6a | Other Land Remaining Other Land | | | | | | | | | | | | |
| 3B6b | Land Converted to Other Land | | | | | | | | | | | | |
| 3B6bi | Forest Land Converted to Other Land | | | | | | | | | | | | |
| 3B6bii | Cropland Converted to Other Land | | | | | | | | | | | | |
| 3B6biii | Grassland Converted to Other Land | | | | | | | | | | | | |
| 3B6biv | Wetlands Converted to Other Land | | | | | | | | | | | | |
| 3B6bv | Settlements Converted to Other Land | | | | | | | | | | | | |

- (1) Where the carbon contained in the emissions of CH₄ and CO is significant part of the sectoral emissions, this should be copied from the corresponding columns in the Sectoral Background Table 3.4. This amount of carbon emitted as CH₄ and CO is then subtracted from carbon stock change to avoid double counting (see Volume 4, Section 2.2.3).
- (2) The activity data used for this column correspond to the difference between the column Area and the Area of organic soils.
- (3) CO₂ Emissions from Wetlands are reported in a separate background table (Table 3.3) that includes all gases emitted from Wetlands.

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Table 3.3 AFOLU Background Table: Emissions in Wetlands (3B4) (Unchanged)

| Categories | Activity data | Emissions | | |
|--|---------------|-----------------|-----------------|------------------|
| | Area | CO ₂ | CH ₄ | N ₂ O |
| | (ha) | (Gg) | | |
| 3B4 Wetlands | | | | |
| 3B4a Wetlands Remaining Wetlands | | | | |
| 3B4ai Peatlands Remaining Peatlands | | | | |
| 3B4aii Flooded Land Remaining Flooded Land | | | | |
| 3B4b Land Converted to Wetlands | | | | |
| 3B4bi Land Converted for Peat Extraction | | | | |
| 3B4bii Land Converted to Flooded Land | | | | |
| 3B4biii Land Converted to Other Wetlands | | | | |

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Table 3.4 AFOLU Background Table: Biomass Burning (3C1) (1 of 2) (Unchanged)

| Categories ⁽¹⁾ | Activity data | | | Emissions | | | | | | | Information item: Carbon emitted as CH ₄ and CO ⁽⁵⁾ | |
|--|----------------------------|------|---------------|--------------------------------|--------------------------------|-----|------------------|-------------------|-----|-----------------|---|--------|
| | Description ⁽²⁾ | Unit | Values | CO ₂ ⁽³⁾ | CH ₄ ⁽⁴⁾ | | N ₂ O | CO ⁽⁴⁾ | | NO _x | Biomass | DOM |
| | | | | | Biomass | DOM | | Biomass | DOM | | | |
| | | | (ha or kg dm) | | (Gg) | | | | | | | (C Gg) |
| 3C1 Biomass Burning | | | | | | | | | | | | |
| 3C1a Biomass Burning in Forest Land | | | | | | | | | | | | |
| Controlled Burning | | | | | | | | | | | | |
| Wildfires | | | | | | | | | | | | |
| 3C1b Biomass Burning in Cropland | | | | | | | | | | | | |
| Biomass Burning in Cropland Remaining Cropland | | | | | | | | | | | | |
| Controlled Burning | | | | | | | | | | | | |
| Wildfires | | | | | | | | | | | | |
| Biomass burning in Forest Land Converted to Cropland | | | | | | | | | | | | |
| Controlled Burning | | | | | | | | | | | | |
| Wildfires | | | | | | | | | | | | |
| Biomass Burning in Non Forest Land Converted to Cropland | | | | | | | | | | | | |
| Controlled Burning | | | | | | | | | | | | |
| Wildfires | | | | | | | | | | | | |
| 3C1c Biomass Burning in Grassland | | | | | | | | | | | | |
| Burning in Grassland Remaining Grassland | | | | | | | | | | | | |
| Controlled Burning | | | | | | | | | | | | |
| Wildfires | | | | | | | | | | | | |
| Burning in Forest Land Converted to Grassland | | | | | | | | | | | | |
| Controlled Burning | | | | | | | | | | | | |
| Wildfires | | | | | | | | | | | | |
| Burning in Non Forest Land Converted to Grassland | | | | | | | | | | | | |
| Controlled Burning | | | | | | | | | | | | |
| Wildfires | | | | | | | | | | | | |
| 3C1d Biomass Burning in All Other Land | | | | | | | | | | | | |
| Biomass Burning in Other Land Remaining All Other Land | | | | | | | | | | | | |

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Table 3.4 AFOLU Background Table: Biomass Burning (3C1) (1 of 2) (Unchanged)

| | | | | | | | | | | | | |
|--------------------|--|--|--|--|--|--|--|--|--|--|--|--|
| Controlled Burning | | | | | | | | | | | | |
| Wildfires | | | | | | | | | | | | |

Table 3.4 AFOLU Background Table: Biomass Burning (3C1) (2 of 2) (Unchanged)

| Categories ⁽¹⁾ | Activity data | | | Emissions | | | | | | | Information item: Carbon emitted as CH ₄ and CO ⁽⁵⁾ | |
|--|----------------------------|------|---------------|--------------------------------|--------------------------------|-----|------------------|-------------------|-----|-----------------|---|--------|
| | Description ⁽²⁾ | Unit | Values | CO ₂ ⁽³⁾ | CH ₄ ⁽⁴⁾ | | N ₂ O | CO ⁽⁴⁾ | | NO _x | Biomass | DOM |
| | | | | | Biomass | DOM | | Biomass | DOM | | | |
| | | | (ha or kg dm) | | (Gg) | | | | | | | (C Gg) |
| Biomass Burning in Forest Land Converted to All Other Land | | | | | | | | | | | | |
| Controlled Burning | | | | | | | | | | | | |
| Wildfires | | | | | | | | | | | | |
| Biomass Burning in Non Forest Land Converted to All Other Land | | | | | | | | | | | | |
| Controlled Burning | | | | | | | | | | | | |
| Wildfires | | | | | | | | | | | | |

(1) Parties should report both Controlled/Prescribed Burning and Wildfires emissions, where appropriate, in a separate manner.

(2) For each land type data should be selected between area burned or biomass burned. Units for area will be in hectare (ha) and for biomass burned in kilogram dry matter (kg dm).

(3) If CO₂ emissions from biomass burning are not already included in Table 3.2 (Carbon stock changes background table), they should be reported here. Carbon stock changes associated with biomass burning should not also be reported in Table 3.2 to avoid double counting.

(4) CH₄ and CO emissions from biomass burning and DOM are reported separately.

(5) Where the carbon contained in the emissions of CH₄ and CO is a significant part of the sectoral emissions this should be transferred to the corresponding columns in the Sectoral Background Table 3.2. This amount of carbon emitted as CH₄ and CO is then subtracted from carbon stock change to avoid double counting. The conversion factors to convert CH₄ and CO to C (as input to Table 3.2) are 12/16 for CH₄ and 12/28 for CO. (see Volume 4, Section 2.2.3).

Documentation box:

Table 3.5 AFOLU Background Table: CO₂ emissions from Liming (3C2) (Unchanged)

| Categories | Activity data | | | Emissions |
|----------------------------------|-----------------------------|--|---|-----------------|
| | Limestone CaCO ₃ | Dolomite CaMg(CO ₃) ₂ | Total amount of lime applied ⁽²⁾ | CO ₂ |
| | (Mg/yr) | | (Mg/yr) | (Gg) |
| 3C2 Liming ⁽¹⁾ | | | | |
| Forest Land | | | | |
| Cropland | | | | |
| Grassland | | | | |
| Wetland | | | | |
| Other Land | | | | |
| Other | | | | |

(1) If countries are not able to separate liming application for different land use categories, they should use the main category “Liming”. Also, if a country has data broken down to limestone and dolomite at national level, it can be reported under this category.

(2) A country may report aggregate estimates for total lime applications when data are not available for limestone and dolomite.

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**Table 3.6 AFOLU Background Table: CO₂ emissions from Urea Fertilization (3C3)
(Unchanged)**

| Categories | Activity data | Emissions |
|--|------------------------------|-----------------|
| | Total amount of urea applied | CO ₂ |
| | (Mg/yr) | (Gg) |
| 3C3 Urea applied ⁽¹⁾ | | |
| Forest Land | | |
| Cropland | | |
| Grassland | | |
| Settlements | | |
| Other Land | | |

(1) If countries are not able to separate urea application for different land use categories, they should use the main category "Urea applied".

| Documentation box: |
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Table 3.7 AFOLU Background Table: Direct N₂O emissions from Managed Soils (3C4) (Unchanged)

| Categories ⁽¹⁾ | Activity data | Emissions |
|---|----------------------------------|------------------|
| | Total amount of nitrogen applied | N ₂ O |
| | (Gg N/yr) | (Gg) |
| 3C4 Direct N₂O Emissions from Managed Soils | | |
| Inorganic N fertilizer application | | |
| Forest Land | | |
| Cropland | | |
| Grassland | | |
| Settlements | | |
| Other Land | | |
| Organic N applied as fertilizer (manure and sewage sludge) | | |
| Forest Land | | |
| Cropland | | |
| Grassland | | |
| Settlements | | |
| Other Land | | |
| Urine and dung N deposited on pasture, range and paddock by grazing animals ⁽²⁾ | | |
| N in crop residues | | |
| | Area | |
| | (ha) | |
| N mineralization/immobilization associated with loss/gain of soil organic matter resulting from change of land use or management of mineral soils | | |
| Drainage/management of organic soils (i.e., Histosols) | | |

(1) Countries will report at the aggregation level if their activity data allows them within each category. If country has disaggregated data by land use, reporting is also possible using this table.

(2) Only for Grassland.

(3) Only for Cropland.

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Table 3.8 AFOLU Background Table: Indirect N₂O emissions from Managed Soils and Manure Management (3C5 and 3C6) (Unchanged)

| Categories ⁽¹⁾ | Activity data | Emissions |
|--|---|------------------|
| | Total amount of nitrogen applied / excreted | N ₂ O |
| | (Gg N/yr) | (Gg) |
| 3C5 Indirect N₂O emissions from Managed Soils | | |
| From atmospheric deposition of N volatilized from managed soils from agricultural inputs of N (synthetic N fertilizers; organic N applied as fertilizer; urine and dung N deposited on pasture, range and paddock by grazing animals ⁽²⁾ ; N in crop residues ⁽³⁾ ; and N mineralization/immobilization associated with loss/gain of soil organic matter resulting from change of land use or management of mineral soils ⁽³⁾) | | |
| Forest Land | | |
| Cropland | | |
| Grasslands | | |
| Settlements | | |
| Other Land | | |
| From N leaching/runoff from managed soils (i.e. from synthetic N fertilizers; organic N applied as fertilizer; urine and dung N deposited on pasture, range and paddock by grazing animals ⁽²⁾ ; N in crop residues ⁽³⁾ ; and N mineralization/immobilization associated with loss/gain of soil organic matter resulting from change of land use or management of mineral soils ⁽³⁾) | | |
| Forest Land | | |
| Cropland | | |
| Grasslands | | |
| Settlements | | |
| Other Land | | |
| 3C6 Indirect N₂O emissions from Manure Management | | |

(1) Countries will report at the aggregation level if their activity data allows them within each category. If country has disaggregated data by land use, reporting is also possible using this table.

(2) Only for Grassland.

(3) Only for Cropland.

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**Table 3.9 AFOLU Background Table: Non-CO₂ GHG emissions not included elsewhere
(3C7 and 3C8) (Unchanged)**

| Categories | Activity data | Emissions | |
|--------------------------------------|---------------|-----------------|------------------|
| | | CH ₄ | N ₂ O |
| | (ha) | (Gg) | |
| 3C7 Rice Cultivations ⁽¹⁾ | | | |
| 3C8 Other (please specify) | | | |

(1) If a country wishes to report direct N₂O emissions from N fertilizer application to rice field, it should be reported here. Otherwise, in Table 3.7.

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Table 3.10 AFOLU Background Table: Harvested Wood Products (3D1) - Annual carbon HWP contribution to total AFOLU CO₂ removals and emissions and background information (Unchanged)

| | Variable number | | | | | | | | | | |
|--|---|--|---|--|---|---|-------------------------|--|---|---|--|
| | 1A | 1B | 2A | 2B | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Inventory year | Annual Change in stock of HWP in use from consumption | Annual Change in stock of HWP in SWDS from consumption | Annual Change in stock of HWP in use produced from domestic harvest | Annual Change in stock of HWP in SWDS produced from domestic harvest | Annual Imports of wood, and paper products + wood fuel, pulp, recovered paper, roundwood/ chips | Annual Exports of wood, and paper products + wood fuel, pulp, recovered paper, roundwood/ chips | Annual Domestic Harvest | Annual release of carbon to the atmosphere from HWP consumption (from fuelwood & products in use and products in SWDS) | Annual release of carbon to the atmosphere from HWP (including fuelwood) where wood came from domestic harvest (from products in use and products in SWDS) | HWP Contribution to AFOLU CO ₂ emissions/ removals | Approach used to estimate HWP Contribution |
| | $\Delta C_{HWP\ IU\ DC}$ | $\Delta C_{HWP\ SWDS\ DC}$ | $\Delta C_{HWP\ IU\ DH}$ | $\Delta C_{HWP\ SWDS\ DH}$ | P_{IM} | P_{EX} | H | $\uparrow C_{HWP\ DC}$ | $\uparrow C_{HWP\ DH}$ | | |
| | Gg C /yr | | | | | | | | | Gg CO ₂ /yr | |
| 1990 | | | | | | | | | | | |
| | | | | | | | | | | | |
| Report Col 6 or 7 as needed for the approach used. Col 6 or 7 may be computed using Cols 1 through 5 or by a Tier 3 method. Always report Cols 3, 4, and 5. Report Cols 1A, 1B, 2A, 2B if they are used. | | | | | | | | | | | |
| The HWP contribution and approach should be reported in Columns 8 and 9 together with a description of the approach chosen and main assumptions in the Documentation Box | | | | | | | | | | | |
| Additional Variables calculated and used should be reported to enhance the transparency of the results. (e.g., CH ₄ from SWDS if this was used) Add additional columns if needed. | | | | | | | | | | | |
| Note: $\uparrow C_{HWP\ DC} = H + P_{IM} - P_{EX} - \Delta C_{HWP\ IU\ DC} - \Delta C_{HWP\ SWDS\ DC}$ AND $\uparrow C_{HWP\ DH} = H - \Delta C_{HWP\ IU\ DH} - \Delta C_{HWP\ SWDS\ DH}$ | | | | | | | | | | | |

Documentation box:

Table 4 Waste Sectoral Table (Unchanged)

| Categories | CO ₂ | CH ₄ | N ₂ O | NO _x | CO | NM VOC ⁽¹⁾ | SO ₂ |
|---|-----------------|-----------------|------------------|-----------------|----|-----------------------|-----------------|
| | (Gg) | | | | | | |
| 4 WASTE | | | | | | | |
| 4A Solid Waste Disposal | | | | | | | |
| 4A1 Managed Waste Disposal Sites | | | | | | | |
| 4A2 Unmanaged Waste Disposal Sites | | | | | | | |
| 4A3 Uncategorised Waste Disposal Sites | | | | | | | |
| 4B Biological Treatment of Solid Waste | | | | | | | |
| 4C Incineration and Open Burning of Waste | | | | | | | |
| 4C1 Waste Incineration | | | | | | | |
| 4C2 Open Burning of Waste | | | | | | | |
| 4D Wastewater Treatment and Discharge | | | | | | | |
| 4D1 Domestic Wastewater Treatment and Discharge | | | | | | | |
| 4D2 Industrial Wastewater Treatment and Discharge | | | | | | | |
| 4E Other (please specify) ⁽²⁾ | | | | | | | |

(1) Countries may wish to report emissions of NMVOCs from waste disposal sites and waste water treatment.

(2) Insert additional rows if necessary.

* Cells to report emissions of NO_x, CO, NMVOC and SO₂ have not been shaded although the physical potential for emissions is lacking for some categories.

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Table 4.1 Waste Background Table: CO₂, CH₄, N₂O emissions (Updated)

| Categories | Type of activity data | unit | Emission factor | | | Emissions | | |
|---|-----------------------|------|-------------------------|-----------------|------------------|-----------------|-----------------|------------------|
| | | | CO ₂ | CH ₄ | N ₂ O | CO ₂ | CH ₄ | N ₂ O |
| | | | (Gg/unit activity data) | | | (Gg) | | |
| 4A Solid Waste Disposal ⁽¹⁾ | | | | | | | | |
| 4A1 Managed Waste Disposal Sites | | | | | | | | |
| 4A2 Unmanaged Waste Disposal Sites | | | | | | | | |
| 4A3 Uncategorised Waste Disposal Sites | | | | | | | | |
| 4B Biological Treatment of Solid Waste | | | | | | | | |
| 4C Incineration and Open Burning of Waste ⁽²⁾ | | | | | | | | |
| 4C1 Waste Incineration | | | | | | | | |
| 4C2 Open Burning of Waste | | | | | | | | |
| 4D Wastewater Treatment and Discharge | | | | | | | | |
| 4D1 Domestic Wastewater Treatment and Discharge | | | | | | | | |
| CH ₄ emissions ⁽³⁾ | | | | | | | | |
| N ₂ O emissions ⁽⁴⁾ | | | | | | | | |
| 4D2 Industrial Wastewater Treatment and Discharge | | | | | | | | |
| CH ₄ emissions ⁽³⁾ | | | | | | | | |
| N ₂ O emissions ⁽⁴⁾ | | | | | | | | |
| 4E Other (please specify) ⁽⁵⁾ | | | | | | | | |

(1) Amount of waste deposited in the SWDS in the inventory year. [mil. tonnes of wet waste/yr] Specification by waste type is encouraged. Emission factor data (parameters used in the calculations) should be reported in FOD parameter sheet or reported separately, when other methods are used.

(2) Waste burned for energy is reported in the Energy Sector under 1A. Information on reporting of waste combustion in the Energy Sector should be given in the documentation box.

(3) Activity data for estimation of CH₄ emissions is total amount of organically degradable material in the wastewater (TOW) [Gg BOD/yr or Gg COD/yr].

(4) Activity data for estimation of N₂O emissions is total amount of nitrogen in wastewater (TN) [Gg N/yr] and total amount of nitrogen in effluent (N_{EFFLUENT}) [Gg N/yr]

(5) Insert additional rows if necessary.

Documentation box:

Table 4.2 Waste Background Table: CH₄ recovery ^{(1) (2)} (Unchanged)

| Categories | Unit | CH ₄ | |
|---|--------------------|-----------------------|--------------------------------|
| | Gg CH ₄ | Flared ⁽³⁾ | Energy recovery ⁽⁴⁾ |
| 4A Solid Waste Disposal | | | |
| 4B Biological Treatment of Solid Waste | | | |
| 4D Wastewater Treatment and Discharge | | | |
| 4D1 Domestic Wastewater Treatment and Discharge | | | |
| 4D2 Industrial Wastewater Treatment and Discharge | | | |
| 4E Other (please specify) ⁽⁵⁾ | | | |

(1) The amount of CH₄ recovery should be reported in this table even if the gas is used for energy.

(2) Flaring and energy recovery should be reported separately, if possible.

(3) Default EF for CH₄ and N₂O from flaring is zero. The CO₂ emissions are not reported as the gas is of biogenic origin.

(4) When CH₄ recovered is used for energy, the emissions from the combustion of the gas should be reported in the Energy sector (under 1A).
Default EF for CH₄ and N₂O from the combustion of the gas is zero.

(5) Insert additional rows if necessary.

Documentation box:

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|--|
| |
|--|

Second-order Draft

Table 4.3 Waste Background Table: Long-term storage of carbon Information items (Unchanged)

| Categories | C ⁽¹⁾ |
|--|------------------|
| | (Gg) |
| Information items ⁽²⁾ | |
| Long-term storage of carbon in waste disposal sites | |
| Annual change in total long-term storage of carbon stored | |
| Annual change in long-term storage of carbon in HWP waste ⁽³⁾ | |

(1) Report in mass carbon.

(2) These items are listed for information only and will not be added to the totals. The carbon should be converted to carbon dioxide.

(3) Carbon stored in wood, paper, cardboard, garden (yard) and park (equal to the annual change in stock of HWP in SWDS from consumption, reported in Table 3.10, Column 1B).

| Documentation box: |
|--------------------|
| |

Table 5A Cross-sectoral Table: Indirect emissions of N₂O ⁽¹⁾⁽²⁾ (Unchanged)

| Categories | Activity data / source emissions | | Emissions |
|--|----------------------------------|-----------------------------------|-----------------------|
| | Emissions NH ₃ | Emissions NO _x | N ₂ O |
| | (Gg NH ₃) | (Gg NO ₂ -equivalents) | (Gg N ₂ O) |
| 1 Energy | | | |
| 2 Industrial Processes and Product Use | | | |
| 3 Agriculture, Forestry and Other Land Use | | | |
| 3C5 Indirect N ₂ O Emissions from managed soils | | | |
| 3C6 Indirect N ₂ O Emissions from manure management | | | |
| Other ⁽³⁾ (Please specify) | | | |
| 4 Waste | | | |
| 5 Other (Please specify) ⁽⁴⁾ | | | |
| | | | |

(1) 90 to 99 percent of ammonia emissions originate in the Agriculture Sector. Other emission sources for ammonia are in the Energy Sector (such as combustion, petroleum refining, catalyst cars in the transport sector), in the Industrial processes sector in particular from production of ammonia, nitric acid, ammonium nitrate and phosphate, urea, and fertilizers), and from metal industry (coke ovens battery operations), and also in the Waste Sector (solid waste disposal and waste incineration).

(2) Indirect N₂O emissions from nitrogen leaching /runoff from managed soils in AFOLU categories are included in Table 3.8.

(3) Any other sources not included in 3C5 and 3C6.

(4) Insert additional rows if necessary.

Documentation box:

Second-order Draft

Table 6A Trends of CO₂ (1 of 3) (Updated)

(Gg)

| Categories | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | ... |
|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|
| Total National Emissions and Removals | | | | | | | | | | | | | | | | | | | | |
| 1 ENERGY | | | | | | | | | | | | | | | | | | | | |
| 1A Fuel Combustion Activities | | | | | | | | | | | | | | | | | | | | |
| 1A1 Energy Industries | | | | | | | | | | | | | | | | | | | | |
| 1A2 Manufacturing Industries and Construction | | | | | | | | | | | | | | | | | | | | |
| 1A3 Transport | | | | | | | | | | | | | | | | | | | | |
| 1A4 Other Sectors | | | | | | | | | | | | | | | | | | | | |
| 1A5 Non-Specified | | | | | | | | | | | | | | | | | | | | |
| 1B Fugitive Emissions from Fuels | | | | | | | | | | | | | | | | | | | | |
| 1B1 Solid Fuels | | | | | | | | | | | | | | | | | | | | |
| 1B2 Oil and Natural Gas | | | | | | | | | | | | | | | | | | | | |
| 1B3 Other Emissions from Energy Production | | | | | | | | | | | | | | | | | | | | |
| 1C Carbon Dioxide Transport and Storage | | | | | | | | | | | | | | | | | | | | |
| 2 INDUSTRIAL PROCESSES AND PRODUCT USE | | | | | | | | | | | | | | | | | | | | |
| 2A Mineral Industry | | | | | | | | | | | | | | | | | | | | |
| 2A1 Cement Production | | | | | | | | | | | | | | | | | | | | |
| 2A2 Lime Production | | | | | | | | | | | | | | | | | | | | |
| 2A3 Glass Production | | | | | | | | | | | | | | | | | | | | |
| 2A4 Other Process Uses of Carbonates | | | | | | | | | | | | | | | | | | | | |
| 2A5 Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| 2B Chemical Industry | | | | | | | | | | | | | | | | | | | | |
| 2B1 Ammonia Production | | | | | | | | | | | | | | | | | | | | |
| 2B2 Nitric Acid Production | | | | | | | | | | | | | | | | | | | | |
| 2B3 Adipic Acid Production | | | | | | | | | | | | | | | | | | | | |
| 2B4 Caprolactam, Glyoxal and Glyoxylic Acid Production | | | | | | | | | | | | | | | | | | | | |
| 2B5 Carbide Production | | | | | | | | | | | | | | | | | | | | |
| 2B6 Titanium Dioxide Production | | | | | | | | | | | | | | | | | | | | |
| 2B7 Soda Ash Production | | | | | | | | | | | | | | | | | | | | |
| 2B8 Petrochemical and Carbon Black Production | | | | | | | | | | | | | | | | | | | | |
| 2B9 Fluorochemical Production | | | | | | | | | | | | | | | | | | | | |
| 2B10 Hydrogen Production | | | | | | | | | | | | | | | | | | | | |
| 2B10 Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| 2C Metal Industry | | | | | | | | | | | | | | | | | | | | |
| 2C1 Iron and Steel Production | | | | | | | | | | | | | | | | | | | | |
| 2C2 Ferroalloys Production | | | | | | | | | | | | | | | | | | | | |
| 2C3 Aluminium Production | | | | | | | | | | | | | | | | | | | | |
| 2C4 Magnesium Production | | | | | | | | | | | | | | | | | | | | |
| 2C5 Lead Production | | | | | | | | | | | | | | | | | | | | |
| 2C6 Zinc Production | | | | | | | | | | | | | | | | | | | | |
| 2C7 Rare Earths Production | | | | | | | | | | | | | | | | | | | | |
| 2C7 Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| 2D Non-Energy Products from Fuels and Solvent Use | | | | | | | | | | | | | | | | | | | | |
| 2D1 Lubricant Use | | | | | | | | | | | | | | | | | | | | |
| 2D2 Paraffin Wax Use | | | | | | | | | | | | | | | | | | | | |
| 2D3 Solvent Use | | | | | | | | | | | | | | | | | | | | |
| 2D4 Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| 2E Electronics Industry | | | | | | | | | | | | | | | | | | | | |
| 2E1 Integrated Circuit or Semiconductor | | | | | | | | | | | | | | | | | | | | |
| 2E2 TFT Flat Panel Display | | | | | | | | | | | | | | | | | | | | |
| 2E3 Photovoltaics | | | | | | | | | | | | | | | | | | | | |
| 2E4 Heat Transfer Fluid | | | | | | | | | | | | | | | | | | | | |
| 2E5 Other (please specify) | | | | | | | | | | | | | | | | | | | | |

Table 6A Trends of CO₂ (2of 3) (Unchanged)

(Gg)

| Categories | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | ... |
|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|
| 2F Product Uses as Substitutes for Ozone Depleting Substances | | | | | | | | | | | | | | | | | | | | |
| 2F1 Refrigeration and Air Conditioning | | | | | | | | | | | | | | | | | | | | |
| 2F2 Foam Blowing Agents | | | | | | | | | | | | | | | | | | | | |
| 2F3 Fire Protection | | | | | | | | | | | | | | | | | | | | |
| 2F4 Aerosols | | | | | | | | | | | | | | | | | | | | |
| 2F5 Solvents | | | | | | | | | | | | | | | | | | | | |
| 2F6 Other Applications | | | | | | | | | | | | | | | | | | | | |
| 2G Other Product Manufacture and Use | | | | | | | | | | | | | | | | | | | | |
| 2G1 Electrical Equipment | | | | | | | | | | | | | | | | | | | | |
| 2G2 SF ₆ and PFCs from Other Product Uses | | | | | | | | | | | | | | | | | | | | |
| 2G3 N ₂ O from Product Uses | | | | | | | | | | | | | | | | | | | | |
| 2G4 Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| 2H Other | | | | | | | | | | | | | | | | | | | | |
| 2H1 Pulp and Paper Industry | | | | | | | | | | | | | | | | | | | | |
| 2H2 Food and Beverages Industry | | | | | | | | | | | | | | | | | | | | |
| 2H3 Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| 3 AGRO CULTURE, FORESTRY AND OTHER LAND USE | | | | | | | | | | | | | | | | | | | | |
| 3A Livestock | | | | | | | | | | | | | | | | | | | | |
| 3A1 Enteric Fermentation | | | | | | | | | | | | | | | | | | | | |
| 3A2 Manure Management | | | | | | | | | | | | | | | | | | | | |
| 3B Land | | | | | | | | | | | | | | | | | | | | |
| 3B1 Forest Land | | | | | | | | | | | | | | | | | | | | |
| 3B2 Cropland | | | | | | | | | | | | | | | | | | | | |
| 3B3 Grassland | | | | | | | | | | | | | | | | | | | | |
| 3B4 Wetlands | | | | | | | | | | | | | | | | | | | | |
| 3B5 Settlements | | | | | | | | | | | | | | | | | | | | |
| 3B6 Other Land | | | | | | | | | | | | | | | | | | | | |
| 3C Aggregate Sources and Non-CO₂ Emissions Sources on Land | | | | | | | | | | | | | | | | | | | | |
| 3C1 Biomass Burning | | | | | | | | | | | | | | | | | | | | |
| 3C2 Liming | | | | | | | | | | | | | | | | | | | | |
| 3C3 Urea Application | | | | | | | | | | | | | | | | | | | | |
| 3C4 Direct N ₂ O Emissions from Managed Soils | | | | | | | | | | | | | | | | | | | | |
| 3C5 Indirect N ₂ O Emissions from Managed Soils | | | | | | | | | | | | | | | | | | | | |
| 3C6 Indirect N ₂ O Emissions from Manure Management | | | | | | | | | | | | | | | | | | | | |
| 3C7 Rice Cultivations | | | | | | | | | | | | | | | | | | | | |
| 3C8 Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| 3D Other | | | | | | | | | | | | | | | | | | | | |
| 3D1 Harvested Wood Products | | | | | | | | | | | | | | | | | | | | |
| 3D2 Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| 4 WASTE | | | | | | | | | | | | | | | | | | | | |
| 4A Solid Waste Disposal | | | | | | | | | | | | | | | | | | | | |
| 4A1 Managed Waste Disposal Sites | | | | | | | | | | | | | | | | | | | | |
| 4A2 Unmanaged Waste Disposal Sites | | | | | | | | | | | | | | | | | | | | |
| 4A3 4A3 Uncategorised Waste Disposal Sites | | | | | | | | | | | | | | | | | | | | |
| 4B Biological Treatment of Solid Waste | | | | | | | | | | | | | | | | | | | | |
| 4C Incineration and Open Burning of Waste | | | | | | | | | | | | | | | | | | | | |
| 4C1 Waste Incineration | | | | | | | | | | | | | | | | | | | | |
| 4C2 Open Burning of Waste | | | | | | | | | | | | | | | | | | | | |

Second-order Draft

Table 6A Trends of CO₂ (3 of 3) (Unchanged)

(Gg)

| Categories | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | ... |
|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|
| 4D Wastewater Treatment and Discharge | | | | | | | | | | | | | | | | | | | | |
| 4D1 Domestic Wastewater Treatment and Discharge | | | | | | | | | | | | | | | | | | | | |
| 4D2 Industrial Wastewater Treatment and Discharge | | | | | | | | | | | | | | | | | | | | |
| 4E Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| 5 OTHER | | | | | | | | | | | | | | | | | | | | |
| 5A Indirect N₂O emissions from the Atmospheric Deposition of Nitrogen in NO_x and NH₃ | | | | | | | | | | | | | | | | | | | | |
| 5B Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |
| Memo items | | | | | | | | | | | | | | | | | | | | |
| International Bunkers | | | | | | | | | | | | | | | | | | | | |
| International Aviation (International Bunkers) | | | | | | | | | | | | | | | | | | | | |
| International Water-borne Transport (International Bunkers) | | | | | | | | | | | | | | | | | | | | |
| Multilateral Operations | | | | | | | | | | | | | | | | | | | | |
| Information items ⁽¹⁾ | | | | | | | | | | | | | | | | | | | | |
| CO ₂ from Biomass Burning for Energy Production | | | | | | | | | | | | | | | | | | | | |
| CO ₂ captured | | | | | | | | | | | | | | | | | | | | |
| For domestic storage | | | | | | | | | | | | | | | | | | | | |
| For storage in other countries | | | | | | | | | | | | | | | | | | | | |
| Long-term storage of carbon in waste disposal sites | | | | | | | | | | | | | | | | | | | | |
| Annual change in total long-term storage of carbon stored | | | | | | | | | | | | | | | | | | | | |
| Annual change in long-term storage of carbon in HWP waste | | | | | | | | | | | | | | | | | | | | |
| Other (please specify) | | | | | | | | | | | | | | | | | | | | |

(1) Here, both emissions and removals can be listed.

Table 6B Trends of CH₄ (1 of 3) (Updated)
(Gg)

| Categories | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | ... |
|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|
| Total National Emissions and Removals | | | | | | | | | | | | | | | | | | | | |
| 1 ENERGY | | | | | | | | | | | | | | | | | | | | |
| 1A Fuel Combustion Activities | | | | | | | | | | | | | | | | | | | | |
| 1A1 Energy Industries | | | | | | | | | | | | | | | | | | | | |
| 1A2 Manufacturing Industries and Construction | | | | | | | | | | | | | | | | | | | | |
| 1A3 Transport | | | | | | | | | | | | | | | | | | | | |
| 1A4 Other Sectors | | | | | | | | | | | | | | | | | | | | |
| 1A5 Non-Specified | | | | | | | | | | | | | | | | | | | | |
| 1B Fugitive Emissions from Fuels | | | | | | | | | | | | | | | | | | | | |
| 1B1 Solid Fuels | | | | | | | | | | | | | | | | | | | | |
| 1B2 Oil and Natural Gas | | | | | | | | | | | | | | | | | | | | |
| 1B3 Other Emissions from Energy Production | | | | | | | | | | | | | | | | | | | | |
| 1C Carbon Dioxide Transport and Storage | | | | | | | | | | | | | | | | | | | | |
| 2 INDUSTRIAL PROCESSES AND PRODUCT USE | | | | | | | | | | | | | | | | | | | | |
| 2A Mineral Industry | | | | | | | | | | | | | | | | | | | | |
| 2A1 Cement Production | | | | | | | | | | | | | | | | | | | | |
| 2A2 Lime Production | | | | | | | | | | | | | | | | | | | | |
| 2A3 Glass Production | | | | | | | | | | | | | | | | | | | | |
| 2A4 Other Process Uses of Carbonates | | | | | | | | | | | | | | | | | | | | |
| 2A5 Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| 2B Chemical Industry | | | | | | | | | | | | | | | | | | | | |
| 2B1 Ammonia Production | | | | | | | | | | | | | | | | | | | | |
| 2B2 Nitric Acid Production | | | | | | | | | | | | | | | | | | | | |
| 2B3 Adipic Acid Production | | | | | | | | | | | | | | | | | | | | |
| 2B4 Caprolactam, Glyoxal and Glyoxylic Acid Production | | | | | | | | | | | | | | | | | | | | |
| 2B5 Carbide Production | | | | | | | | | | | | | | | | | | | | |
| 2B6 Titanium Dioxide Production | | | | | | | | | | | | | | | | | | | | |
| 2B7 Soda Ash Production | | | | | | | | | | | | | | | | | | | | |
| 2B8 Petrochemical and Carbon Black Production | | | | | | | | | | | | | | | | | | | | |
| 2B9 Fluorochemical Production | | | | | | | | | | | | | | | | | | | | |
| 2B10 Hydrogen Production | | | | | | | | | | | | | | | | | | | | |
| 2B11 Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| 2C Metal Industry | | | | | | | | | | | | | | | | | | | | |
| 2C1 Iron and Steel Production | | | | | | | | | | | | | | | | | | | | |
| 2C2 Ferroalloys Production | | | | | | | | | | | | | | | | | | | | |
| 2C3 Aluminium Production | | | | | | | | | | | | | | | | | | | | |
| 2C4 Magnesium Production | | | | | | | | | | | | | | | | | | | | |
| 2C5 Lead Production | | | | | | | | | | | | | | | | | | | | |
| 2C6 Zinc Production | | | | | | | | | | | | | | | | | | | | |
| 2C7 Rare Earths Production | | | | | | | | | | | | | | | | | | | | |
| 2C8 Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| 2D Non-Energy Products from Fuels and Solvent Use | | | | | | | | | | | | | | | | | | | | |
| 2D1 Lubricant Use | | | | | | | | | | | | | | | | | | | | |
| 2D2 Paraffin Wax Use | | | | | | | | | | | | | | | | | | | | |
| 2D3 Solvent Use | | | | | | | | | | | | | | | | | | | | |
| 2D4 Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| 2E Electronics Industry | | | | | | | | | | | | | | | | | | | | |
| 2E1 Integrated Circuit or Semiconductor | | | | | | | | | | | | | | | | | | | | |
| 2E2 TFT Flat Panel Display | | | | | | | | | | | | | | | | | | | | |
| 2E3 Photovoltaics | | | | | | | | | | | | | | | | | | | | |
| 2E4 Heat Transfer Fluid | | | | | | | | | | | | | | | | | | | | |
| 2E5 Other (please specify) | | | | | | | | | | | | | | | | | | | | |

Second-order Draft

Table 6B Trends of CH₄ (2 of 3) (Unchanged)

(Gg)

| Categories | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | ... |
|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|
| 2F Product Uses as Substitutes for Ozone Depleting Substances | | | | | | | | | | | | | | | | | | | | |
| 2F1 Refrigeration and Air Conditioning | | | | | | | | | | | | | | | | | | | | |
| 2F2 Foam Blowing Agents | | | | | | | | | | | | | | | | | | | | |
| 2F3 Fire Protection | | | | | | | | | | | | | | | | | | | | |
| 2F4 Aerosols | | | | | | | | | | | | | | | | | | | | |
| 2F5 Solvents | | | | | | | | | | | | | | | | | | | | |
| 2F6 Other Applications | | | | | | | | | | | | | | | | | | | | |
| 2G Other Product Manufacture and Use | | | | | | | | | | | | | | | | | | | | |
| 2G1 Electrical Equipment | | | | | | | | | | | | | | | | | | | | |
| 2G2 SF ₆ and PFCs from Other Product Uses | | | | | | | | | | | | | | | | | | | | |
| 2G3 N ₂ O from Other Product Uses | | | | | | | | | | | | | | | | | | | | |
| 2G4 Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| 2H Other | | | | | | | | | | | | | | | | | | | | |
| 2H1 Pulp and Paper Industry | | | | | | | | | | | | | | | | | | | | |
| 2H2 Food and Beverages Industry | | | | | | | | | | | | | | | | | | | | |
| 2H3 Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| 3 AGRICULTURE, FORESTRY AND OTHER LAND USE | | | | | | | | | | | | | | | | | | | | |
| 3A Livestock | | | | | | | | | | | | | | | | | | | | |
| 3A1 Enteric Fermentation | | | | | | | | | | | | | | | | | | | | |
| 3A2 Manure Management | | | | | | | | | | | | | | | | | | | | |
| 3B Land | | | | | | | | | | | | | | | | | | | | |
| 3B1 Forest Land | | | | | | | | | | | | | | | | | | | | |
| 3B2 Cropland | | | | | | | | | | | | | | | | | | | | |
| 3B3 Grassland | | | | | | | | | | | | | | | | | | | | |
| 3B4 Wetlands | | | | | | | | | | | | | | | | | | | | |
| 3B5 Settlements | | | | | | | | | | | | | | | | | | | | |
| 3B6 Other Land | | | | | | | | | | | | | | | | | | | | |
| 3C Aggregate Sources and Non-CO₂ Emissions Sources on Land | | | | | | | | | | | | | | | | | | | | |
| 3C1 Biomass Burning | | | | | | | | | | | | | | | | | | | | |
| 3C2 Liming | | | | | | | | | | | | | | | | | | | | |
| 3C3 Urea Application | | | | | | | | | | | | | | | | | | | | |
| 3C4 Direct N ₂ O Emissions from Managed Soils | | | | | | | | | | | | | | | | | | | | |
| 3C5 Indirect N ₂ O Emissions from Managed Soils | | | | | | | | | | | | | | | | | | | | |
| 3C6 Indirect N ₂ O Emissions from Manure Management | | | | | | | | | | | | | | | | | | | | |
| 3C7 Rice Cultivations | | | | | | | | | | | | | | | | | | | | |
| 3C8 Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| 3D Other | | | | | | | | | | | | | | | | | | | | |
| 3D1 Harvested Wood Products | | | | | | | | | | | | | | | | | | | | |
| 3D2 Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| 4 WASTE | | | | | | | | | | | | | | | | | | | | |
| 4A Solid Waste Disposal | | | | | | | | | | | | | | | | | | | | |
| 4A1 Managed Waste Disposal Sites | | | | | | | | | | | | | | | | | | | | |
| 4A2 Unmanaged Waste Disposal Sites | | | | | | | | | | | | | | | | | | | | |
| 4A3 Uncategorised Waste Disposal Sites | | | | | | | | | | | | | | | | | | | | |
| 4B Biological Treatment of Solid Waste | | | | | | | | | | | | | | | | | | | | |
| 4C Incineration and Open Burning of Waste | | | | | | | | | | | | | | | | | | | | |

[illegible]

Table 6BTrends of CH₄ (3 of 3) (Unchanged)
(Gg)

[illegible]

(1) Here, both emissions and removals can be listed.

Second-order Draft

Table 6C Trends of N₂O (1 of 3) (Updated)
(Gg)

| Categories | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | ... |
|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|
| Total National Emissions and Removals | | | | | | | | | | | | | | | | | | | | |
| 1 ENERGY | | | | | | | | | | | | | | | | | | | | |
| 1A Fuel Combustion Activities | | | | | | | | | | | | | | | | | | | | |
| 1A1 Energy Industries | | | | | | | | | | | | | | | | | | | | |
| 1A2 Manufacturing Industries and Construction | | | | | | | | | | | | | | | | | | | | |
| 1A3 Transport | | | | | | | | | | | | | | | | | | | | |
| 1A4 Other Sectors | | | | | | | | | | | | | | | | | | | | |
| 1A5 Non-Specified | | | | | | | | | | | | | | | | | | | | |
| 1B Fugitive Emissions from Fuels | | | | | | | | | | | | | | | | | | | | |
| 1B1 Solid Fuels | | | | | | | | | | | | | | | | | | | | |
| 1B2 Oil and Natural Gas | | | | | | | | | | | | | | | | | | | | |
| 1B3 Other Emissions from Energy Production | | | | | | | | | | | | | | | | | | | | |
| 1C Carbon Dioxide Transport and Storage | | | | | | | | | | | | | | | | | | | | |
| 2 INDUSTRIAL PROCESSES AND PRODUCT USE | | | | | | | | | | | | | | | | | | | | |
| 2A Mineral Industry | | | | | | | | | | | | | | | | | | | | |
| 2A1 Cement Production | | | | | | | | | | | | | | | | | | | | |
| 2A2 Lime Production | | | | | | | | | | | | | | | | | | | | |
| 2A3 Glass Production | | | | | | | | | | | | | | | | | | | | |
| 2A4 Other Process Uses of Carbonates | | | | | | | | | | | | | | | | | | | | |
| 2A5 Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| 2B Chemical Industry | | | | | | | | | | | | | | | | | | | | |
| 2B1 Ammonia Production | | | | | | | | | | | | | | | | | | | | |
| 2B2 Nitric Acid Production | | | | | | | | | | | | | | | | | | | | |
| 2B3 Adipic Acid Production | | | | | | | | | | | | | | | | | | | | |
| 2B4 Caprolactam, Glyoxal and Glyoxylic Acid Production | | | | | | | | | | | | | | | | | | | | |
| 2B5 Carbide Production | | | | | | | | | | | | | | | | | | | | |
| 2B6 Titanium Dioxide Production | | | | | | | | | | | | | | | | | | | | |
| 2B7 Soda Ash Production | | | | | | | | | | | | | | | | | | | | |
| 2B8 Petrochemical and Carbon Black Production | | | | | | | | | | | | | | | | | | | | |
| 2B9 Fluorochemical Production | | | | | | | | | | | | | | | | | | | | |
| 2B10 Hydrogen Production | | | | | | | | | | | | | | | | | | | | |
| 2B10 Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| 2C Metal Industry | | | | | | | | | | | | | | | | | | | | |
| 2C1 Iron and Steel Production | | | | | | | | | | | | | | | | | | | | |
| 2C2 Ferroalloys Production | | | | | | | | | | | | | | | | | | | | |
| 2C3 Aluminium Production | | | | | | | | | | | | | | | | | | | | |
| 2C4 Magnesium Production | | | | | | | | | | | | | | | | | | | | |
| 2C5 Lead Production | | | | | | | | | | | | | | | | | | | | |
| 2C6 Zinc Production | | | | | | | | | | | | | | | | | | | | |
| 2C7 Rare Earths Production | | | | | | | | | | | | | | | | | | | | |
| 2C7 Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| 2D Non-Energy Products from Fuels and Solvent Use | | | | | | | | | | | | | | | | | | | | |
| 2D1 Lubricant Use | | | | | | | | | | | | | | | | | | | | |
| 2D2 Paraffin Wax Use | | | | | | | | | | | | | | | | | | | | |
| 2D3 Solvent Use | | | | | | | | | | | | | | | | | | | | |
| 2D4 Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| 2E Electronics Industry | | | | | | | | | | | | | | | | | | | | |
| 2E1 Integrated Circuit or Semiconductor | | | | | | | | | | | | | | | | | | | | |
| 2E2 TFT Flat Panel Display | | | | | | | | | | | | | | | | | | | | |
| 2E3 Photovoltaics | | | | | | | | | | | | | | | | | | | | |
| 2E4 Heat Transfer Fluid | | | | | | | | | | | | | | | | | | | | |
| 2E5 Other (please specify) | | | | | | | | | | | | | | | | | | | | |

Table 6C Trends of N₂O (2of 3) (Unchanged)

(Gg)

| Categories | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | ... |
|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|
| 2F Product Uses as Substitutes for Ozone Depleting Substances | | | | | | | | | | | | | | | | | | | | |
| 2F1 Refrigeration and Air Conditioning | | | | | | | | | | | | | | | | | | | | |
| 2F2 Foam Blowing Agents | | | | | | | | | | | | | | | | | | | | |
| 2F3 Fire Protection | | | | | | | | | | | | | | | | | | | | |
| 2F4 Aerosols | | | | | | | | | | | | | | | | | | | | |
| 2F5 Solvents | | | | | | | | | | | | | | | | | | | | |
| 2F6 Other Applications | | | | | | | | | | | | | | | | | | | | |
| 2G Other Product Manufacture and Use | | | | | | | | | | | | | | | | | | | | |
| 2G1 Electrical Equipment | | | | | | | | | | | | | | | | | | | | |
| 2G2 SF ₆ and PFCs from Other Product Uses | | | | | | | | | | | | | | | | | | | | |
| 2G3 N ₂ O from Other Product Uses | | | | | | | | | | | | | | | | | | | | |
| 2G4 Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| 2H Other | | | | | | | | | | | | | | | | | | | | |
| 2H1 Pulp and Paper Industry | | | | | | | | | | | | | | | | | | | | |
| 2H2 Food and Beverage Industry | | | | | | | | | | | | | | | | | | | | |
| 2H3 Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| 3 AGRO CULTURE, FORESTRY AND OTHER LAND USE | | | | | | | | | | | | | | | | | | | | |
| 3A Livestock | | | | | | | | | | | | | | | | | | | | |
| 3A1 Enteric Fermentation | | | | | | | | | | | | | | | | | | | | |
| 3A2 Manure Management | | | | | | | | | | | | | | | | | | | | |
| 3B Land | | | | | | | | | | | | | | | | | | | | |
| 3B1 Forest land | | | | | | | | | | | | | | | | | | | | |
| 3B2 Cropland | | | | | | | | | | | | | | | | | | | | |
| 3B3 Grassland | | | | | | | | | | | | | | | | | | | | |
| 3B4 Wetlands | | | | | | | | | | | | | | | | | | | | |
| 3B5 Settlements | | | | | | | | | | | | | | | | | | | | |
| 3B6 Other land | | | | | | | | | | | | | | | | | | | | |
| 3C Aggregate Sources and non-CO₂ Emissions Sources on Land | | | | | | | | | | | | | | | | | | | | |
| 3C1 Biomass Burning | | | | | | | | | | | | | | | | | | | | |
| 3C2 Liming | | | | | | | | | | | | | | | | | | | | |
| 3C3 Urea Application | | | | | | | | | | | | | | | | | | | | |
| 3C4 Direct N ₂ O Emissions from Managed Soils | | | | | | | | | | | | | | | | | | | | |
| 3C5 Indirect N ₂ O Emissions from Managed Soils | | | | | | | | | | | | | | | | | | | | |
| 3C6 Indirect N ₂ O Emissions from Manure Management | | | | | | | | | | | | | | | | | | | | |
| 3C7 Rice Cultivations | | | | | | | | | | | | | | | | | | | | |
| 3C8 Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| 3D Other | | | | | | | | | | | | | | | | | | | | |
| 3D1 Harvested Wood Products | | | | | | | | | | | | | | | | | | | | |
| 3D2 Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| 4 WASTE | | | | | | | | | | | | | | | | | | | | |
| 4A Solid Waste Disposal | | | | | | | | | | | | | | | | | | | | |
| 4A1 Managed Waste Disposal Sites | | | | | | | | | | | | | | | | | | | | |
| 4A2 Unmanaged Waste Disposal Sites | | | | | | | | | | | | | | | | | | | | |
| 4A3 Uncategorised Waste Disposal Sites | | | | | | | | | | | | | | | | | | | | |
| 4B Biological Treatment of Solid Waste | | | | | | | | | | | | | | | | | | | | |
| 4C Incineration and Open Burning of Waste | | | | | | | | | | | | | | | | | | | | |
| 4C1 Waste Incineration | | | | | | | | | | | | | | | | | | | | |
| 4C2 Open Burning of Waste | | | | | | | | | | | | | | | | | | | | |

Second-order Draft

Table 6C Trends of N₂O (3 of 3)

(Gg)

| Categories | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | ... |
|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|
| 4D Wastewater Treatment and Discharge | | | | | | | | | | | | | | | | | | | | |
| 4D1 Domestic Wastewater Treatment and Discharge | | | | | | | | | | | | | | | | | | | | |
| 4D2 Industrial Wastewater Treatment and Discharge | | | | | | | | | | | | | | | | | | | | |
| 4E Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| 5 OTHER | | | | | | | | | | | | | | | | | | | | |
| 5A Indirect N₂O emissions from the Atmospheric Deposition of Nitrogen in NO_x and NH₃ | | | | | | | | | | | | | | | | | | | | |
| 5B Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |
| Memo items | | | | | | | | | | | | | | | | | | | | |
| International Bunkers | | | | | | | | | | | | | | | | | | | | |
| International Aviation (International Bunkers) | | | | | | | | | | | | | | | | | | | | |
| International Water-borne Transport (International Bunkers) | | | | | | | | | | | | | | | | | | | | |
| Multilateral Operations | | | | | | | | | | | | | | | | | | | | |
| Information items ⁽¹⁾ | | | | | | | | | | | | | | | | | | | | |
| CO ₂ from Biomass Burning for Energy Production | | | | | | | | | | | | | | | | | | | | |
| CO ₂ captured | | | | | | | | | | | | | | | | | | | | |
| For domestic storage | | | | | | | | | | | | | | | | | | | | |
| For storage in other countries | | | | | | | | | | | | | | | | | | | | |
| Long-term storage of carbon in waste disposal sites | | | | | | | | | | | | | | | | | | | | |
| Annual change in total long-term storage of carbon stored | | | | | | | | | | | | | | | | | | | | |
| Annual change in long-term storage of carbon in HWP waste | | | | | | | | | | | | | | | | | | | | |
| Other (please specify) | | | | | | | | | | | | | | | | | | | | |

(1) Here, both emissions and removals can be listed.

Table 6D Trends of HFCs (CO₂ equivalents (Gg)) (Updated)

| Categories | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | ... |
|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|
| Total National Emissions and Removals | | | | | | | | | | | | | | | | | | | | |
| 2 INDUSTRIAL PROCESSES AND PRODUCT USE | | | | | | | | | | | | | | | | | | | | |
| 2A Mineral Industry | | | | | | | | | | | | | | | | | | | | |
| 2A1 Cement Production | | | | | | | | | | | | | | | | | | | | |
| 2A2 Lime Production | | | | | | | | | | | | | | | | | | | | |
| 2A3 Glass Production | | | | | | | | | | | | | | | | | | | | |
| 2A4 Other Process Uses of Carbonates | | | | | | | | | | | | | | | | | | | | |
| 2A5 Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| 2B Chemical Industry | | | | | | | | | | | | | | | | | | | | |
| 2B1 Ammonia Production | | | | | | | | | | | | | | | | | | | | |
| 2B2 Nitric Acid Production | | | | | | | | | | | | | | | | | | | | |
| 2B3 Adipic Acid Production | | | | | | | | | | | | | | | | | | | | |
| 2B4 Caprolactam, Glyoxal and Glyoxylic Acid Production | | | | | | | | | | | | | | | | | | | | |
| 2B5 Carbide Production | | | | | | | | | | | | | | | | | | | | |
| 2B6 Titanium Dioxide Production | | | | | | | | | | | | | | | | | | | | |
| 2B7 Soda Ash Production | | | | | | | | | | | | | | | | | | | | |
| 2B8 Petrochemical and Carbon Black Production | | | | | | | | | | | | | | | | | | | | |
| 2B9 Fluorochemical Production | | | | | | | | | | | | | | | | | | | | |
| 2B10 Hydrogen Production | | | | | | | | | | | | | | | | | | | | |
| 2B10 Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| 2C Metal Industry | | | | | | | | | | | | | | | | | | | | |
| 2C1 Iron and Steel Production | | | | | | | | | | | | | | | | | | | | |
| 2C2 Ferroalloys Production | | | | | | | | | | | | | | | | | | | | |
| 2C3 Aluminium Production | | | | | | | | | | | | | | | | | | | | |
| 2C4 Magnesium Production | | | | | | | | | | | | | | | | | | | | |
| 2C5 Lead Production | | | | | | | | | | | | | | | | | | | | |
| 2C6 Zinc Production | | | | | | | | | | | | | | | | | | | | |
| 2C7 Rare Earths Production | | | | | | | | | | | | | | | | | | | | |
| 2C8 Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| 2D Non-Energy Products from Fuels and Solvent Use | | | | | | | | | | | | | | | | | | | | |
| 2D1 Lubricant Use | | | | | | | | | | | | | | | | | | | | |
| 2D2 Paraffin Wax Use | | | | | | | | | | | | | | | | | | | | |
| 2D3 Solvents Use | | | | | | | | | | | | | | | | | | | | |
| 2D4 Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| 2E Electronics Industry | | | | | | | | | | | | | | | | | | | | |
| 2E1 Integrated Circuit or Semiconductor | | | | | | | | | | | | | | | | | | | | |
| 2E2 TFT Flat Panel Display | | | | | | | | | | | | | | | | | | | | |
| 2E3 Photovoltaics | | | | | | | | | | | | | | | | | | | | |
| 2E4 Heat Transfer Fluid | | | | | | | | | | | | | | | | | | | | |
| 2E5 Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| 2F Product Uses as Substitutes for Ozone Depleting Substances | | | | | | | | | | | | | | | | | | | | |
| 2F1 Refrigeration and Air Conditioning | | | | | | | | | | | | | | | | | | | | |
| 2F2 Foam Blowing Agents | | | | | | | | | | | | | | | | | | | | |
| 2F3 Fire Protection | | | | | | | | | | | | | | | | | | | | |
| 2F4 Aerosols | | | | | | | | | | | | | | | | | | | | |
| 2F5 Solvents | | | | | | | | | | | | | | | | | | | | |
| 2F6 Other Applications | | | | | | | | | | | | | | | | | | | | |
| 2G Other Product Manufacture and Use | | | | | | | | | | | | | | | | | | | | |
| 2G1 Electrical Equipment | | | | | | | | | | | | | | | | | | | | |
| 2G2 SF ₆ and PFCs from Other Product Uses | | | | | | | | | | | | | | | | | | | | |
| 2G3 N ₂ O from Other Product Uses | | | | | | | | | | | | | | | | | | | | |
| 2G4 Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| 2H Other | | | | | | | | | | | | | | | | | | | | |

| Categories | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|------------|------|------|------|------|------|------|------|------|------|------|
|------------|------|------|------|------|------|------|------|------|------|------|

[illegible]

| | | | | | | | | | | | | | | | | | | | | |
|-----------|-----------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 2G3 | N2O from Other Product Uses | | | | | | | | | | | | | | | | | | | |
| 2G4 | Other (please specify) | | | | | | | | | | | | | | | | | | | |
| 2H | Other | | | | | | | | | | | | | | | | | | | |
| 2H1 | Pulp and Paper Industry | | | | | | | | | | | | | | | | | | | |
| 2H2 | Food and Beverages Industry | | | | | | | | | | | | | | | | | | | |
| 2H3 | Other (please specify) | | | | | | | | | | | | | | | | | | | |

Table 6F Trends of SF₆ (CO₂ equivalents (Gg)) (Updated)

| Categories | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | ... |
|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|
| Total National Emissions and Removals | | | | | | | | | | | | | | | | | | | | |
| 2 INDUSTRIAL PROCESSES AND PRODUCT USE | | | | | | | | | | | | | | | | | | | | |
| 2A Mineral Industry | | | | | | | | | | | | | | | | | | | | |
| 2A1 Cement Production | | | | | | | | | | | | | | | | | | | | |
| 2A2 Lime Production | | | | | | | | | | | | | | | | | | | | |
| 2A3 Glass Production | | | | | | | | | | | | | | | | | | | | |
| 2A4 Other Process Uses of Carbonates | | | | | | | | | | | | | | | | | | | | |
| 2A5 Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| 2B Chemical Industry | | | | | | | | | | | | | | | | | | | | |
| 2B1 Ammonia Production | | | | | | | | | | | | | | | | | | | | |
| 2B2 Nitric Acid Production | | | | | | | | | | | | | | | | | | | | |
| 2B3 Adipic Acid Production | | | | | | | | | | | | | | | | | | | | |
| 2B4 Caprolactam, Glyoxal and Glyoxylic Acid Production | | | | | | | | | | | | | | | | | | | | |
| 2B5 Carbide Production | | | | | | | | | | | | | | | | | | | | |
| 2B6 Titanium Dioxide Production | | | | | | | | | | | | | | | | | | | | |
| 2B7 Soda Ash Production | | | | | | | | | | | | | | | | | | | | |
| 2B8 Petrochemical and Carbon Black Production | | | | | | | | | | | | | | | | | | | | |
| 2B9 Fluorochemical Production | | | | | | | | | | | | | | | | | | | | |
| 2B10 Hydrogen Production | | | | | | | | | | | | | | | | | | | | |
| 2B11 Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| 2C Metal Industry | | | | | | | | | | | | | | | | | | | | |
| 2C1 Iron and Steel Production | | | | | | | | | | | | | | | | | | | | |
| 2C2 Ferroalloys Production | | | | | | | | | | | | | | | | | | | | |
| 2C3 Aluminium Production | | | | | | | | | | | | | | | | | | | | |
| 2C4 Magnesium Production | | | | | | | | | | | | | | | | | | | | |
| 2C5 Lead Production | | | | | | | | | | | | | | | | | | | | |
| 2C6 Zinc Production | | | | | | | | | | | | | | | | | | | | |
| 2C7 Rare Earths Production | | | | | | | | | | | | | | | | | | | | |
| 2C8 Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| 2D Non-Energy Products from Fuels and Solvent Use | | | | | | | | | | | | | | | | | | | | |
| 2D1 Lubricant Use | | | | | | | | | | | | | | | | | | | | |
| 2D2 Paraffin Wax Use | | | | | | | | | | | | | | | | | | | | |
| 2D3 Solvent Use | | | | | | | | | | | | | | | | | | | | |
| 2D4 Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| 2E Electronics Industry | | | | | | | | | | | | | | | | | | | | |
| 2E1 Integrated Circuit or Semiconductor | | | | | | | | | | | | | | | | | | | | |
| 2E2 TFT Flat Panel Display | | | | | | | | | | | | | | | | | | | | |
| 2E3 Photovoltaics | | | | | | | | | | | | | | | | | | | | |
| 2E4 Heat Transfer Fluid | | | | | | | | | | | | | | | | | | | | |
| 2E5 Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| 2F Product Uses as Substitutes for Ozone Depleting Substances | | | | | | | | | | | | | | | | | | | | |
| 2F1 Refrigeration and Air Conditioning | | | | | | | | | | | | | | | | | | | | |
| 2F2 Foam Blowing Agents | | | | | | | | | | | | | | | | | | | | |
| 2F3 Fire Protection | | | | | | | | | | | | | | | | | | | | |
| 2F4 Aerosols | | | | | | | | | | | | | | | | | | | | |
| 2F5 Solvents | | | | | | | | | | | | | | | | | | | | |
| 2F6 Other Applications | | | | | | | | | | | | | | | | | | | | |

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| | | | | | | | | | | | | | | | | | | | | | | |
|-----------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 2G | Other Product Manufacture and Use | | | | | | | | | | | | | | | | | | | | | |
| 2G1 | Electrical Equipment | | | | | | | | | | | | | | | | | | | | | |
| 2G2 | SF ₆ and PFCs from Other Product Uses | | | | | | | | | | | | | | | | | | | | | |
| 2G3 | N ₂ O from Other Product Uses | | | | | | | | | | | | | | | | | | | | | |
| 2G4 | Other (please specify) | | | | | | | | | | | | | | | | | | | | | |
| 2H | Other | | | | | | | | | | | | | | | | | | | | | |
| 2H1 | Pulp and Paper Industry | | | | | | | | | | | | | | | | | | | | | |
| 2H2 | Food and Beverages Industry | | | | | | | | | | | | | | | | | | | | | |
| 2H3 | 2H3 Other (please specify) | | | | | | | | | | | | | | | | | | | | | |

Table 6G Trends of other gases ⁽¹⁾ (Gg) (Updated)

| Categories | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | ... |
|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|
| Total National Emissions and Removals | | | | | | | | | | | | | | | | | | | | |
| 2 INDUSTRIAL PROCESSES AND PRODUCT USE | | | | | | | | | | | | | | | | | | | | |
| 2A Mineral Industry | | | | | | | | | | | | | | | | | | | | |
| 2A1 Cement Production | | | | | | | | | | | | | | | | | | | | |
| 2A2 Lime Production | | | | | | | | | | | | | | | | | | | | |
| 2A3 Glass Production | | | | | | | | | | | | | | | | | | | | |
| 2A4 Other Process Uses of Carbonates | | | | | | | | | | | | | | | | | | | | |
| 2A5 Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| 2B Chemical Industry | | | | | | | | | | | | | | | | | | | | |
| 2B1 Ammonia Production | | | | | | | | | | | | | | | | | | | | |
| 2B2 Nitric Acid Production | | | | | | | | | | | | | | | | | | | | |
| 2B3 Adipic Acid Production | | | | | | | | | | | | | | | | | | | | |
| 2B4 Caprolactam, Glyoxal and Glyoxylic Acid Production | | | | | | | | | | | | | | | | | | | | |
| 2B5 Carbide Production | | | | | | | | | | | | | | | | | | | | |
| 2B6 Titanium Dioxide Production | | | | | | | | | | | | | | | | | | | | |
| 2B7 Soda Ash Production | | | | | | | | | | | | | | | | | | | | |
| 2B8 Petrochemical and Carbon Black Production | | | | | | | | | | | | | | | | | | | | |
| 2B9 Fluorochemical Production | | | | | | | | | | | | | | | | | | | | |
| 2B10 Hydrogen Production | | | | | | | | | | | | | | | | | | | | |
| 2B11 Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| 2C Metal Industry | | | | | | | | | | | | | | | | | | | | |
| 2C1 Iron and Steel Production | | | | | | | | | | | | | | | | | | | | |
| 2C2 Ferroalloys Production | | | | | | | | | | | | | | | | | | | | |
| 2C3 Aluminium Production | | | | | | | | | | | | | | | | | | | | |
| 2C4 Magnesium Production | | | | | | | | | | | | | | | | | | | | |
| 2C5 Lead Production | | | | | | | | | | | | | | | | | | | | |
| 2C6 Zinc Production | | | | | | | | | | | | | | | | | | | | |
| 2C7 Rare Earths Production | | | | | | | | | | | | | | | | | | | | |
| 2C7 Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| 2D Non-Energy Products from Fuels and Solvent Use | | | | | | | | | | | | | | | | | | | | |
| 2D1 Lubricant Use | | | | | | | | | | | | | | | | | | | | |
| 2D2 Paraffin Wax Use | | | | | | | | | | | | | | | | | | | | |
| 2D3 Solvent Use | | | | | | | | | | | | | | | | | | | | |
| 2D4 Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| 2E Electronics Industry | | | | | | | | | | | | | | | | | | | | |
| 2E1 Integrated Circuit or Semiconductor | | | | | | | | | | | | | | | | | | | | |
| 2E2 TFT Flat Panel Display | | | | | | | | | | | | | | | | | | | | |
| 2E3 Photovoltaics | | | | | | | | | | | | | | | | | | | | |
| 2E4 Heat Transfer Fluid | | | | | | | | | | | | | | | | | | | | |
| 2E5 Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| 2F Product Uses as Substitutes for Ozone Depleting Substances | | | | | | | | | | | | | | | | | | | | |
| 2F1 Refrigeration and Air Conditioning | | | | | | | | | | | | | | | | | | | | |
| 2F2 Foam Blowing Agents | | | | | | | | | | | | | | | | | | | | |
| 2F3 Fire Protection | | | | | | | | | | | | | | | | | | | | |
| 2F4 Aerosols | | | | | | | | | | | | | | | | | | | | |
| 2F5 Solvents | | | | | | | | | | | | | | | | | | | | |
| 2F6 Other Applications (please specify) | | | | | | | | | | | | | | | | | | | | |
| 2G Other Product Manufacture and Use | | | | | | | | | | | | | | | | | | | | |
| 2G1 Electrical Equipment | | | | | | | | | | | | | | | | | | | | |
| 2G2 SF ₆ and PFCs from Other Product Uses | | | | | | | | | | | | | | | | | | | | |
| 2G3 N ₂ O from Other Product Uses | | | | | | | | | | | | | | | | | | | | |
| 2G4 Other (please specify) | | | | | | | | | | | | | | | | | | | | |
| 2H Other | | | | | | | | | | | | | | | | | | | | |
| 2H1 Pulp and Paper Industry | | | | | | | | | | | | | | | | | | | | |
| 2H2 Food and Beverages Industry | | | | | | | | | | | | | | | | | | | | |
| 2H3 Other (please specify) | | | | | | | | | | | | | | | | | | | | |

(1) This includes all other GHGs including fluorinated gases.

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Table 7A Uncertainties (Unchanged)

| IPCC category | Gas | Base year emissions /removals | Year <i>t</i> emissions /removals | Activity data uncertainty | | Emission factor /estimation parameter uncertainty (combined if more than one estimation parameter is used) | | Combined uncertainty | | Contribution to variance in Year <i>t</i> | Inventory trend in national emissions for year <i>t</i> increase with respect to base year | Uncertainty introduced into the trend in total national emissions with respect to Base Year | | Approach and Comments |
|--------------------------------------|-----------------|-------------------------------|-----------------------------------|---------------------------|-------|--|-------|----------------------|-------|---|--|---|-------|-----------------------|
| | | Gg CO ₂ equivalent | Gg CO ₂ equivalent | (-) % | (+) % | (-) % | (+) % | (-) % | (+) % | (fraction) | (% of base year) | (-) % | (+) % | |
| E.g. 1.A.1. Energy Industries Fuel 1 | CO ₂ | | | | | | | | | | | | | |
| E.g. 1.A.1. Energy Industries Fuel 2 | CO ₂ | | | | | | | | | | | | | |
| Etc... | ... | | | | | | | | | | | | | |
| Total | | | | | | | | | | | | | | |

Table 7B Summary of Key Category analysis (Unchanged)

Quantitative method used: Approach 1/Approach 1 and Approach 2

| IPCC Category Code | IPCC Category | Greenhouse Gas | Identification criteria ⁽¹⁾ | Comments ⁽²⁾ |
|--------------------|---------------|----------------|--|-------------------------|
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(1) The notation keys to be used for this column:

L1 = key category according to Approach 1 Level Assessment

L2 = key category according to Approach 2 Level Assessment

T1 = key category according to Approach 1 Trend Assessment

T2 = key category according to Approach 2 Trend Assessment

Q = key category according to qualitative criteria

(2) In the column for comments, reasons for a qualitative assessment can be provided.