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**National Inventory Document Template**

Editable version 1.0

**CBIT-GSP National Inventory Document Template**

Editable version 1.0

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**FOREWORD TO THE CBIT-GSP NID TEMPLATE**

The development of national greenhouse gas inventories (NGI) is a task requiring highly technical precision that the Parties to the Paris Agreement shall undertake biennially starting from 2024. Its multiple benefits include providing the Parties, especially developing countries, with a means to track progress made in implementing and achieving their committed goals for GHG emission control and reduction to mitigate climate impacts. Nevertheless, it is not only important to periodically carry out these inventories, it is also of paramount importance that inventories are developed following high quality and transparency standards to foster mutual trust, and that the associated results are reported, disseminated and understood in a timely manner by the international community.

Accordingly, although the *Modalities, procedures and guidelines for the transparency framework* (Decision 18/CMA.1) and the *Outline of the national inventory document, pursuant to the modalities, procedures and guidelines for the transparency framework* (Annex V, Decision 5/CMA.3) provide guidelines that are in theory necessary to report the inventory results to the Secretariat of the United Nations Framework Convention on Climate Change (UNFCCC), in practice, the preparation and reporting of inventories would be made easier if the countries have supporting tools to aid this work.

To this end, the *Capacity-building Initiative for Transparency and Global Support Programme* (CBIT-GSP)[[1]](#footnote-1) makes the *CBIT-GSP National Inventory Document Template* available as a tool for the climate transparency community. This template compiles experiences, good practices and lessons learned from the preparation and review of reports, for both developing and developed countries, containing inventory results based on the precepts of the UNFCCC and the Paris Agreement.

We hope that this *CBIT-GSP National Inventory Document Template* will become a useful tool for inventory technical teams in developing countries for the submission of their future biennial transparency reports (BTR) by providing additional support to improve quality, transparency and ambition when reporting their progress and updating their next nationally determined contributions.

We would like to express our profound gratitude to the vast number of experts and countries who used the test versions of this template to prepare their own national inventory documents and who kindly submitted valuable feedback, enabling us to make adjustments to the current version, as presented in this document.

**CBIT-GSP NID TEMPLATE HANDBOOK**

**Introduction to the CBIT-GSP NID Template**

Pursuant to Article 13, paragraph 7(a), of the Paris Agreement, each Party shall provide a national inventory report (NIR) of anthropogenic emissions by sources and removals by sinks of greenhouse gases (GHGs).

NIRs consist of a **national inventory document** (NID) and common reporting tables (CRT) to be submitted to the Secretariat of the United Nations Framework Convention on Climate Change (UNFCCC), pursuant to the *modalities, procedures and guidelines* (MPG), no later than December 31, 2024, either as a stand-alone report or as a component of the biennial transparency reports. The NIDs submitted by the Parties to the Secretariat of the UNFCCC can be viewed and downloaded from the repository at: <https://unfccc.int/first-biennial-transparency-reports>.

This tool, titled *CBIT-GSP National Inventory Document Template* (hereinafter referred to as the *NID Template*) has been prepared by the *Capacity-building Initiative for Transparency and Global Support Programme* (CBIT-GSP), based on the experience of the Latin American Network of National Greenhouse Gas Inventories (RedINGEI), with the primary objective of **providing a standardized, editable template** of the national inventory document and national GHG inventory (NGI) chapter that can be included in biennial transparency reports or in national communications of countries from the CBIT-GSP regional networks.

The *NID Template* has been prepared in line with the following documents:

* *Outline of the national inventory document, pursuant to the modalities, procedures and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement* (Annex V, Decision 5/CMA.3);[[2]](#footnote-2)
* *Modalities, procedures and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement (MPG);*[[3]](#footnote-3)
* *Common reporting tables for the electronic reporting of the information in the national inventory reports of anthropogenic emissions by sources and removals by sinks of greenhouse gases* (Annex I, Decision 5/CMA.3);[[4]](#footnote-4)
* *2006 IPCC Guidelines for National Greenhouse Gas Inventories;[[5]](#footnote-5)*
* *2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Wetlands;[[6]](#footnote-6)*
* *2019 Refinement to the 2006 IPCC Guidelines.*[[7]](#footnote-7)

**How to use the NID Template**

The *NID Template* includes a proposal for the general structure of the national inventory document (based on Annex V of Decision 5/CMA.1) and a description of the contents to be covered in each section (between brackets []), including examples of tables and figures. Each section (as appropriate) includes one number highlighted in turquoise which refers to the MPG provision that is being implemented and, if applicable, the flexibility offered to **developing countries** that may need it.

Table 1 summarizes the chapters of the *NID Template* and the MPG provisions covered by them, indicating when the provision offers flexibility to developing countries that may need it.

**Table 1.**

Summary of the chapters of the *NID Template* and related MPG provisions.

| ***Chapter*** | ***MPG*** |
| --- | --- |
| Chapter 1. National circumstances, institutional arrangements and cross-cutting information | 4, 5, 6, 17, 18, 19a, 19b, 19c, 19d, 20, 21, 22, 23, 24, 25(FX), 29(FX), 30, 31, 32(FX), 33, 34(FX), 35(FX), 37, 39, 40, 41, 42, 44, 45, 46 and 48(FX) |
| Chapter 2. Trends in greenhouse gas emissions and removals | 47, 48(FX), 50, 51, 52, 53, 57(FX) and 58(FX) |
| Chapter 3. Energy (CRT 1) | 4, 5, 6, 7, 17, 20, 21, 22, 23, 24, 26, 27, 28, 29(FX), 34(FX), 35(FX), 36, 39, 40, 43, 44, 46, 47, 48(FX), 50, 51, 53, 54, 57(FX) and 58(FX) |
| Chapter 4. Industrial processes and product use (CRT 2) | 4, 5, 6, 7, 17, 20, 21, 22, 23, 24, 26, 27, 28, 29(FX), 34(FX), 35(FX), 39, 40, 43, 44, 46, 47, 48(FX), 49, 50, 51, 57(FX) and 58(FX) |
| Chapter 5. Agriculture (CRT 3) | 4, 5, 6, 7, 17, 20, 21, 22, 23, 24, 26, 27, 28, 29(FX), 34(FX), 35(FX), 39, 40, 43, 44, 46, 47, 48(FX), 50, 51, 57(FX) and 58(FX) |
| Chapter 6. Land use, land-use change and forestry (CRT 4) | 4, 5, 6, 7, 17, 20, 21, 22, 23, 24, 26, 27, 28, 29(FX), 34(FX), 35(FX), 39, 40, 43, 44, 46, 47, 48(FX), 50, 51, 55, 56, 57(FX) and 58(FX) |
| Chapter 7. Waste (CRT 5) | 4, 5, 6, 7, 17, 20, 21, 22, 23, 24, 26, 27, 28, 29(FX), 34(FX), 35(FX), 39, 40, 43, 44, 46, 47, 48(FX), 50, 51, 57(FX) and 58(FX) |
| Chapter 8. Other (CRT 6) | Not applicable |
| Chapter 9. Indirect emissions of CO2 and N2O | 7, 17, 20, 21, 22, 23, 24, 26, 27, 28, 29(FX), 34(FX), 35(FX), 39, 40, 43, 44, 46, 47, 50, 51, 52, 57(FX) and 58(FX) |
| Chapter 10. Recalculations and improvements | 7a, 7b, 7c, 7d, 28 and 43 |
| Annexes to the national inventory document | 25(FX), 29(FX), 34(FX), 35(FX) and 36 |

Note: FX means that the provision offers flexibility to countries that may need it.

Source: CBIT-GSP.

It is worth mentioning that this template aims to support developing countries in the development and timely submission of their NIR. The guidance and suggestions should not be deemed mandatory as, ultimately, the countries should submit inventory information pursuant to the MPGs. This template only suggests possible approaches and examples pursuant to the good practices that have proven useful for the countries. Similarly, each of the included tables and figures should be adapted to the national circumstances of each country.

The *NID Template* is a large document (over 295 pages) because it seeks to be as comprehensive as possible with regard to the contents a country may submit. Each country may edit it to remove or delete the contents that are not relevant to their national circumstances; however, the structure of the contents (table of contents) should not be significantly altered, as the goal of the standardized structures is to ensure comparability between the contents of NIDs from different countries. For example, if no GHG emissions occur in section *4.6. Electronic industry (CRT 2.E)* in a country, the entire chapter can be replaced by the text: "This category does not occur in the country" while maintaining the title of the section, preserving the standardized structure of the NID and, thus, its comparability.

It is also important to mention that the ETF reporting calculation tools that are already available for preparing tabular formats of the BTR provide table formats that can be incorporated into the NID. For more details see: <https://unfccc.int/biennial-transparency-reports>. It is recommended not to fill out the tables included in the Template directly onto the Word file. If possible, use the tables filled out with values to be provided by the software to avoid duplication of work.

**NID Template structure by chapter**

A brief description of the *NID Template* structure by chapter and its main contents is provided below.

**NID credits and authors**

This section should include the contact information of the person in charge of the national inventory system or, if no system is in place, the person responsible for the national GHG inventory. It should also contain the list of authors and contributions of each chapter, including acknowledgements, if appropriate. Finally, it is recommended to include a predetermined quote for the NID to ensure coherence when users quote the NID and its respective credits.

**NID contents**

This section is the table of contents of the NID (standardized structure). This table of contents should not be modified significantly, as the user just needs to make sure to update the page numbers. In addition, if deemed appropriate by the user, a table of contents for equations, figures and tables may be added.

**NID acronyms and abbreviations**

This section should include all acronyms and abbreviations used in the NID to facilitate understanding and comprehension by the reader.

**NID key messages**

This section is voluntary and may include a bulleted list of the key messages of the NID executive summary. It is possible that this section will focus on decision-makers or will be disseminated among stakeholders unfamiliar with the technical details and contents of the inventories. Therefore, it is suggested to use simple and direct language. If deemed appropriate, the country can delete this section.

**NID executive summary**

This section is the executive summary (ES) of the NID. It is strongly recommended to focus the executive summary on the national GHG inventory results because all methodological issues can be consulted in depth in the chapters of the NID. The executive summary will consist of background information on GHG inventories and climate change; a summary of the national emission and removal trends; an overview of emissions and removals by sector; other relevant information; an analysis of key categories; and, finally, the improvements made to the inventory.

**Chapter 1. National circumstances, institutional arrangements and cross-cutting information**

This chapter should include relevant information that provides the reader with the context and background necessary to understand the dynamics of GHG emissions and removals in the country as it pertains to the national circumstances, institutional arrangements and cross-cutting information of the national GHG inventory. The chapter will consist of background information on GHG inventories and climate change; a description of national circumstances and institutional arrangements; a description of methodologies, methods and data sources; a description of key categories; a description of the QA/QC plan and implementation; the general uncertainty assessment; a general assessment of completeness; metrics; and the summary of any flexibility applied.

**Chapter 2. Trends in greenhouse gas emissions and removals**

This chapter should explain national emissions and removals in detail, including trend visualization through tables and figures. The chapter will consist of a description of trends in aggregated GHG emissions and removals; a description of emission and removal trends by sector and by gas; and a description of precursor gas trends. In addition, if appropriate, the country may include a trend description for other substances that have an impact on climate and for GHG intensity indicators. These contents could provide additional and complementary information for monitoring the nationally determined contribution of each country.

**Chapters 3-8. Energy, IPPU, Agriculture, LULUCF, Waste and Others**

These chapters should provide detailed information on GHG emissions and removals at the sectoral level, especially with regard to details on the methodology used to estimate GHGs in the sector, by category. The sectoral chapters will consist of an overview of the sector (description, GHG trend, and general methodological issues); the description and trend in GHGs by each sector category, including methodological issues (choice of activity data, emission factors); a description of any flexibility applied; uncertainty assessment and time-series consistency; QA/QC; recalculations; and planned improvements.

**Chapter 9. Indirect CO2 and N2O emissions**

This chapter should provide detailed information on the estimation of indirect CO2 and N2O emissions in the national GHG inventory. The chapter will consist of a description of sources of indirect CO2 and N2O emissions; methodological issues; uncertainty assessment and time-series consistency; QA/QC; recalculations; and planned improvements.

**Chapter 10. Recalculations and improvements**

This chapter should provide information pertaining to the recalculations and improvements made to the inventory. The chapter will consist of an explanation and justification for recalculations; implications for emission and removal levels; implications for emission and removal trends; areas of improvement and capacity-building in response to the review process; and areas of improvement and capacity-building related to the flexibility provisions.

**Annexes to the national inventory document**

The annexes to the NID should provide any additional in-depth information on GHG emissions and removals estimates of the country and cross-cutting issues to improve the transparency and quality of the national inventory report. The annexes to the NID will consist of detailed annexes of key categories; the uncertainty assessment; a detailed description of the reference approach; the quality assurance and quality control plan; any additional information, including methodological descriptions; and common reporting tables.

**References**

This section should include all references quoted or used in the NID.

**NID CREDITS AND AUTHORS**

**Contact of [[country] National Inventory System/[country] national GHG inventory]**

|  |  |
| --- | --- |
| **Name:** |  |
| **Title:** |  |
| **Unit:** |  |
| **Organization:** |  |
| **Address:** |  |
| **Telephone:** |  |
| **Email:** |  |
| **Website:** |  |

**List of [country] NID authors and contributions**

|  |  |
| --- | --- |
| **Main author:** | [Full name], [Title], [Institution] |
| **Editor:** | [Full name], [Title], [Institution] |
| **Chapter 1:** | [Full name], [Title], [Institution] |
| **Chapter 2:** | [Full name], [Title], [Institution] |
| **Chapter 3:** | [Full name], [Title], [Institution] |
| **Chapter 4:** | [Full name], [Title], [Institution] |
| **Chapter 5:** | [Full name], [Title], [Institution] |
| **Chapter 6:** | [Full name], [Title], [Institution] |
| **Chapter 7:** | [Full name], [Title], [Institution] |
| **Chapter 8:** | [Full name], [Title], [Institution] |
| **Chapter 9:** | [Full name], [Title], [Institution] |
| **Chapter 10:** | [Full name], [Title], [Institution] |
| **Text review:** | [Full name], [Title], [Institution] |
| **Other credits:** | [Full name], [Title], [Institution] |

**Suggested quote for [country] NID**

[Include suggested quote]

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**NID ACRONYMS AND ABBREVIATIONS**

|  |  |
| --- | --- |
| **AR5** | IPCC Fifth Assessment Report |
| **BTR** | Biennial transparency report |
| **C** | Confidential (notation key) |
| **CBIT-GSP** | Capacity-building Initiative for Transparency and Global Support Programme |
| **CH4** | Methane |
| **CMA** | Conference of the Parties serving as the meeting of the Parties to the Paris Agreement |
| **CO** | Carbon monoxide |
| **CO2** | Carbon dioxide |
| **CO2 eq** | Carbon dioxide equivalent |
| **CRT** | Common reporting tables |
| **D** | Default value for emission factors |
| **EF** | Emission factor |
| **ES** | Executive summary |
| **GHG** | Greenhouse gas |
| **GWP** | Global warming potentials |
| **HFC** | Hydrofluorocarbons |
| **IE** | Included elsewhere (notation key) |
| **IPCC** | Intergovernmental Panel on Climate Change |
| **IPPU** | Industrial processes and product use (sector) |
| **kt** | Kilotonne or gigagram |
| **LULUCF** | Land use, land-use change and forestry (sector) |
| **MPG** | Modalities, procedures and guidelines for the transparency framework of the Paris Agreement |
| **N2O** | Nitrous oxide |
| **NA** | Not applicable (notation key) |
| **NDC** | Nationally determined contributions |
| **NE** | Not estimated (notation key) |
| **NF3** | Nitrogen trifluoride |
| **NGI** | National Greenhouse gas inventory |
| **NID** | National inventory document |
| **NIR** | National inventory report |
| **NMVOC** | Non-methane volatile organic compound |
| **NO** | Not occurring (notation key) |
| **NOx** | Nitrogen oxides |
| **ODS** | Ozone depleting substances |
| **PFC** | Perfluorocarbons |
| **QA/QC** | Quality assurance and quality control |
| **RedINGEI** | Latin American Network of National Greenhouse Gas Inventories, or *Red Latinoamericana de Inventarios Nacionales de Gases de Efecto Invernadero* in Spanish |
| **SF6** | Sulfur hexafluoride |
| **SOx** | Sulfur oxides |
| **UNFCCC** | United Nations Framework Convention on Climate Change |

**NID KEY MESSAGES**

[This voluntary summary contains the **key messages of the NID executive summary**. It is possible that this section will focus on decision-makers or will be disseminated among stakeholders unfamiliar with the technical details and contents of the inventories. It is recommended to organize the messages in a bullet list]

**Background information on GHG inventories and climate change**

* [Include a bulleted list of the key messages of Section RE.1 of the Executive Summary]

**Summary of trends related to national emissions and removals**

* [Include a bulleted list of the key messages of Section RE.2 of the Executive Summary]

**Overview of sources and sink category emissions estimated and trends**

* [Include a bulleted list of the key messages of Section RE.3 of the Executive Summary]

**Other information**

* [Include a bulleted list of the key messages of Section RE.4 of the Executive Summary]

**Analysis of key categories**

* [Include a bulleted list of the key messages of Section RE.5 of the Executive Summary]

**Improvements introduced**

* [Include a bulleted list of the key messages of Section RE.6 of the Executive Summary]

**NID EXECUTIVE SUMMARY**

[This is a summary of the **NID executive summary**.It is strongly recommended to focus this executive summary on the national GHG inventory results because all methodological issues can be consulted in depth in the chapters of the NID]

1. **Background information on GHG inventories and climate change**
   1. **National GHG inventories and climate change**

[Include a brief summary of Section 1.1 of the NID]

* 1. **National circumstances and institutional arrangements**

[Include a brief summary of Section 1.2 of the NID mainly focusing on a description of the national system and its structure (diagram)]

* 1. **Methodologies and data sources**

[Include a brief summary of Section 1.3 of the NID]

* 1. **QA/QC plan and implementation**

[Include a brief summary of Section 1.5 of the NID]

* 1. **General uncertainty assessment**

[Include a brief summary of Section 1.6 of the NID focusing on results rather than the applied theory or methodology]

* 1. **General assessment of completeness**

[Include a brief summary of Section 1.7 of the NID]

* 1. **Metrics**

[Include a brief summary of Section 1.8 of the NID]

* 1. **Summary of any flexibility applied**

[Include a brief summary of Section 1.9 of the NID]

1. **Summary of trends related to national emissions and removals**
   1. **Trend in aggregated GHG emissions and removals**

[Include a brief summary of Section 2.1 of the NID]

* 1. **Trend in emissions and removals by sector and GHG**

[Include a brief summary of Section 2.2 of the NID]

* 1. **Trend in precursor gas emissions**

[Include a brief summary of Section 2.3 of the NID]

* 1. **Trend in other substances that have an impact on climate**

[Include a brief summary of Section 2.4 of the NID]

* 1. **Trend in GHG intensity indicators**

[Include a brief summary of Section 2.5 of the NID]

1. **Overview of source and sink category emissions estimated and trends**
   1. **Energy (CRT 1)**
      1. **Overview of the sector**

[Include a brief summary of Section 3.1.2 of the NID focused on results]

* + 1. **Fuel combustion (CRT 1.A)**

[Include a brief summary of Section 3.2.1 of the NID focused on results]

* + - 1. **Comparison of the sectoral approach with the reference approach**

[Include a brief summary of Section 3.2.3.1 of the NID focused on results]

* + - 1. **International bunker**

[Include a brief summary of Section 3.2.4.1 of the NID focused on results]

* + - 1. **Feedstocks and no-energy use of fuels**

[Include a brief summary of Section 3.2.5 of the NID]

* + - 1. **Energy industries (CRT 1.A.1)**

[Include a brief summary of Section 3.2.6.1 of the NID focused on results]

* + - 1. **Manufacturing industries and construction (CRT 1.A.2)**

[Include a brief summary of Section 3.2.7.1 of the NID focused on results]

* + - 1. **Transport (CRT 1.A.3)**

[Include a brief summary of Section 3.2.8.1 of the NID focused on results]

* + - 1. **Other sectors (CRT 1.A.4)**

[Include a brief summary of Section 3.2.9.1 of the NID focused on results]

* + - 1. **Other (not specified elsewhere) (CRT 1.A.5)**

[Include a brief summary of Section 3.2.10 of the NID focused on results]

* + 1. **Fugitive emissions from fuels (CRT 1.B)**

[Include a brief summary of Section 3.3.1 of the NID focused on results]

* + - 1. **Solid fuels (CRT 1.B.1)**

[Include a brief summary of Section 3.3.3.1 of the NID focused on results]

* + - 1. **Oil and natural gas (CRT 1.B.2)**

[Include a brief summary of Section 3.3.4.1 of the NID focused on results]

* + 1. **CO2 transport and storage (CRT 1.C)**

[Include a brief summary of Section 3.4.1 of the NID focused on results]

* + - 1. **Transport of CO2 (CRT 1.C.1)**

[Include a brief summary of Section 3.4.3.1 of the NID focused on results]

* + - 1. **Injection and storage (CRT 1.C.2)**

[Include a brief summary of Section 3.4.4.1 of the NID focused on results]

* 1. **Industrial processes and product use (CRT 2)**
     1. **Overview of the sector**

[Include a brief summary of Section 4.1.2 of the NID focused on results]

* + 1. **Mineral industry (CRT 2.A)**

[Include a brief summary of Section 4.2.1 of the NID focused on results]

* + 1. **Chemical industry (CRT 2.B)**

[Include a brief summary of Section 4.3.1 of the NID focused on results]

* + 1. **Metal industry (CRT 2.C)**

[Include a brief summary of Section 4.4.1 of the NID focused on results]

* + 1. **Non-energy products from fuels and solvent use (CRT 2.D)**

[Include a brief summary of Section 4.5.1 of the NID focused on results]

* + 1. **Electronic industry (CRT 2.E)**

[Include a brief summary of Section 4.6.1 of the NID focused on results]

* + 1. **Product uses as substitutes for ODS (CRT 2.F)**

[Include a brief summary of Section 4.7.1 of the NID focused on results]

* + 1. **Other product manufacture and use (CRT 2.G)**

[Include a brief summary of Section 4.8.1 of the NID focused on results]

* + 1. **Other (please specify) (CRT 2.H)**

[Include a brief summary of Section 4.9 of the NID focused on results]

* 1. **Agriculture (CRT 3)**
     1. **Overview of the sector**

[Include a brief summary of Section 5.1.2 of the NID focused on results]

* + 1. **Enteric fermentation (CRT 3.A)**

[Include a brief summary of Section 5.2.1 of the NID focused on results]

* + 1. **Manure management (CRT 3.B)**

[Include a brief summary of Section 5.3.1 of the NID focused on results]

* + 1. **Rice cultivation (CRT 3.C)**

[Include a brief summary of Section 5.4.1 of the NID focused on results]

* + 1. **Agricultural soils (CRT 3.D)**

[Include a brief summary of Section 5.5.1 of the NID focused on results]

* + 1. **Prescribed burning of savannahs (CRT 3.E)**

[Include a brief summary of Section 5.6.1 of the NID focused on results]

* + 1. **Field burning of agricultural residues (CRT 3.F)**

[Include a brief summary of Section 5.7.1 of the NID focused on results]

* + 1. **Liming (CRT 3.G)**

[Include a brief summary of Section 5.8.1 of the NID focused on results]

* + 1. **Urea application (CRT 3.H)**

[Include a brief summary of Section 5.9.1 of the NID focused on results]

* + 1. **Other carbon-containing fertilizers (CRT 3.I)**

[Include a brief summary of Section 5.10.1 of the NID focused on results]

* + 1. **Other (please specify) (CRT 3.J)**

[Include a brief summary of Section 5.11 of the NID focused on results]

* 1. **Land use, land-use change and forestry (CRT 4)**
     1. **Overview of the sector**

[Include a brief summary of Section 6.1.2 of the NID focused on results]

* + 1. **Land-use definitions and land representation approaches**

[Include a brief summary of Section 6.2 of the NID focused on results]

* + 1. **Country-specific approaches**

[Include a brief summary of Section 6.3 of the NID focused on results]

* + 1. **Forest land (CRT 4.A)**

[Include a brief summary of Section 6.4.1 of the NID focused on results]

* + 1. **Cropland (CRT 4.B)**

[Include a brief summary of Section 6.5.1 of the NID focused on results]

* + 1. **Grassland (CRT 4.C)**

[Include a brief summary of Section 6.6.1 of the NID focused on results]

* + 1. **Wetlands (CRT 4.D)**

[Include a brief summary of Section 6.7.1 of the NID focused on results]

* + 1. **Settlements (CRT 4.E)**

[Include a brief summary of Section 6.8.1 of the NID focused on results]

* + 1. **Other land (CRT 4.F)**

[Include a brief summary of Section 6.9.1 of the NID focused on results]

* + 1. **Harvested wood products (CRT 4.G)**

[Include a brief summary of Section 6.10.1 of the NID focused on results]

* + 1. **Other (please specify) (CRT 4.H)**

[Include a brief summary of Section 6.11 of the NID focused on results]

* 1. **Waste (CRT 5)**
     1. **Overview of the sector**

[Include a brief summary of Section 7.1.2 of the NID focused on results]

* + 1. **Solid waste disposal (CRT 5.A)**

[Include a brief summary of Section 7.2.1 of the NID focused on results]

* + 1. **Biological treatment of solid waste (CRT 5.B)**

[Include a brief summary of Section 7.3.1 of the NID focused on results]

* + 1. **Incineration and open burning of waste (CRT 5.C)**

[Include a brief summary of Section 7.4.1 of the NID focused on results]

* + 1. **Wastewater treatment and discharge (CRT 5.D)**

[Include a brief summary of Section 7.5.1 of the NID focused on results]

* + 1. **Other (please specify) (CRT 5.E)**

[Include a brief summary of Section 7.6 of the NID focused on results]

1. **Other information**
   1. **Indirect CO2 and N2O emissions**

[Include a brief summary of Section 9.1 of the NID focused on results]

* 1. **Recalculations**

[Include a brief summary of Section 10.1, 10.2 and 10.3 of the NID]

1. **Analysis of key categories**

[Include a brief summary of Section 1.4 of the NID focusing on results rather than the applied theory or methodology]

1. **Improvements introduced**

[Include a brief summary of Section 10.4 and 10.5 of the NID]

1. **NATIONAL CIRCUMSTANCES, INSTITUTIONAL ARRANGEMENTS AND CROSS-CUTTING INFORMATION**
   1. **Background information on GHG inventories and climate change**
      1. **Climate change**

[Include background information on climate change to provide context for the reader. For example, include an overview of climate change science, greenhouse effect, key drivers (greenhouse gases), international response to climate change (UNFCCC, IPCC, etc.), international negotiation, national climate action, etc. Please, take into account that if the NID is submitted as part of the biennial transparency report (BTR), a large part of this information may be already included in the BTR. Therefore, the country may simply quote the respective section of the BTR]

* + 1. **National greenhouse gas inventories**

[Include specific information on inventories. For example, main UNFCCC decisions or references on the matter, international commitments by the countries, methodologies, sectors and gases included, benefits of inventories, brief history of inventories previously submitted by the country, etc.]

[It is recommended to include an explicit definition of the country's inventory objectives. The inventory will probably have to respond to different objectives depending on the stakeholders involved (for example, fulfilling the country’s international commitments to the UNFCCC to provide information on its climate action and contribution to limit the rise in average global temperatures by 1.5°C, but there may also be domestic targets for the country, such as assessing specific mitigation policies and actions or establishing voluntary or mandatory GHG programmes at the local level). Defining the specific objectives of the inventory could help to identify what inputs, capacities and outputs are required by stakeholders, as well as roles and responsibilities, scope of work (sectors, gases, geographies, years, etc.) and time frames for inventory compilation, reporting and review]

[The country may submit, in a tabular format, basic information on each objective by stakeholder, the sectors or categories involved in the objective, expected outputs by objective, the date of delivery, format of the report, reference to legal acts, etc. The table below is an illustrative example. Please take into account that it may change significantly depending on the national circumstances]

**Table 1-1.**

[Country] national GHG inventory objectives

| ***Objective*** | ***Gases, sectors and categories*** | ***Time series span*** | ***Reporting frequency*** | ***Reporting format*** |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Note:

Source: [], based on *2019 Refinement*.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the national GHG inventory]

* 1. **Description of national circumstances and institutional arrangements**
     1. **National entity or national focal point**

MPG: provision 19a.

[Include a description of the national entity or national focal point with overall responsibility for the national GHG inventory. It is recommended to include or reference the legal arrangement supporting the national entity]

* + 1. **Inventory preparation process**

MPG: provisions 18 and 19b.

[Include a description of the inventory preparation process, including division of specific responsibilities of institutions participating in the inventory preparation to ensure that sufficient activity data collection, choice and development of methods, emission factors and other parameters are in accordance with the IPCC guidelines and the MPGs]

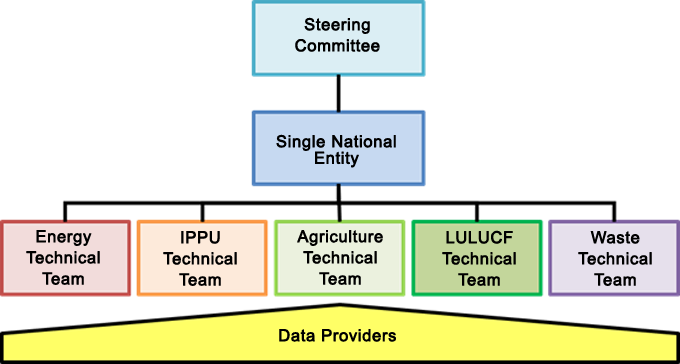
[Before describing the inventory preparation process, it will probably be necessary to include a description of the institutional arrangements for the inventory (national inventory system). If a national system is in place, include the definition of the system, its objectives, how it is structured (centralized, decentralized, mixed), the length of time that it has been in operation, benefits, functions, characteristics, etc.]

[Institutional arrangements include the interactions between organizations that are involved with the inventory or national system. Some countries may also consider the need for new or modified laws or directives establishing requirements for data collection, archiving, reporting, and quality management to formalize institutional arrangements for national GHG inventory compilation in the context of existing national statistical data collection systems. Some countries may need to amend their institutional and procedural arrangements for the continued estimation, compilation and timely reporting of national inventory reports (NIR)]

[As a first approximation to understanding the institutional arrangements, it is suggested to include a system structure diagram to help understand and formalize the roles and responsibilities of the institutions involved. A diagram can provide an overview of the structure that is easy for the reader to understand. The figure below is an illustrative example. Please take into account that the structure may change significantly depending on the national circumstances]

**Figure 1-1.**

Structure diagram of [country] national inventory system



Note:

Source:

[In general, the systems require one coordinating organization (national entity) and implementing or compiler organizations (sectoral technical teams). Therefore, the country should describe the roles and responsibilities of each organization involved in the system (mentioned in the diagram above). Moreover, it is strongly recommended to indicate if legal arrangements exist between the stakeholders to strengthen the work done under the national system framework]

[Describe the organization in the role and responsibility of **national entity** in the system. This organization is usually the inventory coordinator]

[Describe the inventory **steering committee** or the **working group**, and its roles and responsibilities in the system]

[Describe the **sectoral technical teams**, and their roles and responsibilities in the system]

[Describe the **data providers** (activity data, parameters or emission factors), and their roles and responsibilities in the system]

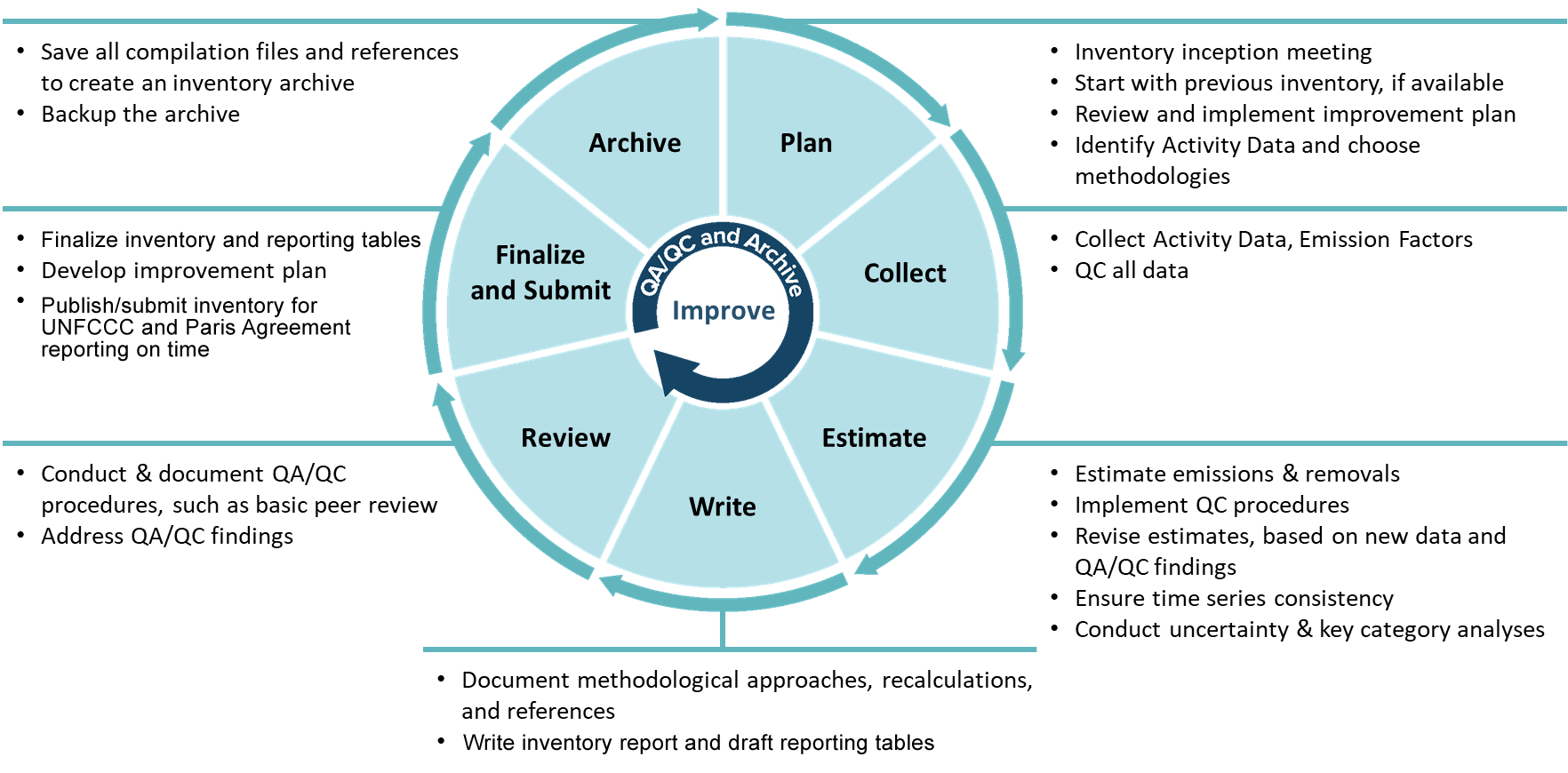
[Include a description of changes to institutional arrangements, if any, compared with the previous update. For example, indicate if changes occurred in the roles or responsibilities of the single national entity, technical teams, steering committee, data providers, or new regulations]

[After the description of institutional arrangements, it is recommended to include background information on the country's inventory planning, preparation and management process from the standpoint of a **permanent workplan** that does not change significantly between compilation cycles]

[Include an inventory cycle diagram. The figure below is an illustrative example, please take into account that the stages and activities of the cycle may change significantly depending on the national circumstances]

**Figure 1-2.**

[Country] national greenhouse gas inventory cycle



Note:

Source: [example based on Figure 2 of the *Inventory Planning* template of the [*Toolkit for Building National GHG Inventory Systems*](https://www.epa.gov/ghgemissions/toolkit-building-national-ghg-inventory-systems) of the United States Environmental Protection Agency]

[Include a detailed description of how the inventory submitted in this report was prepared and managed, information management tools used, specific responsibilities at each stage of the process, expert judgment processes, and main gaps and barriers identified during the process and how they were overcome]

* + 1. **Archiving of information**

MPG: provision 19c.

[Include a description of the archiving of all information for the reported time series, including all disaggregated emission factors and activity data, all documentation about generating and aggregating data, particularly quality assurance/quality control (QA/QC), review results and planned inventory improvements]

[It is recommended to describe de datasets and data flows, including a description of the archive of datasets (documentation and archive system) for the time series span being reported and the agreements with data providers (whether mandatory or voluntary)]

[Include a summary table containing the dataset name, description, sector, provider, etc. In addition, include a data flow diagram for information from and between the databases. The table and diagram below are an illustrative example. Please take into account that they may change significantly depending on the national circumstances]

**Table 1-2.**

Description of [country] system datasets

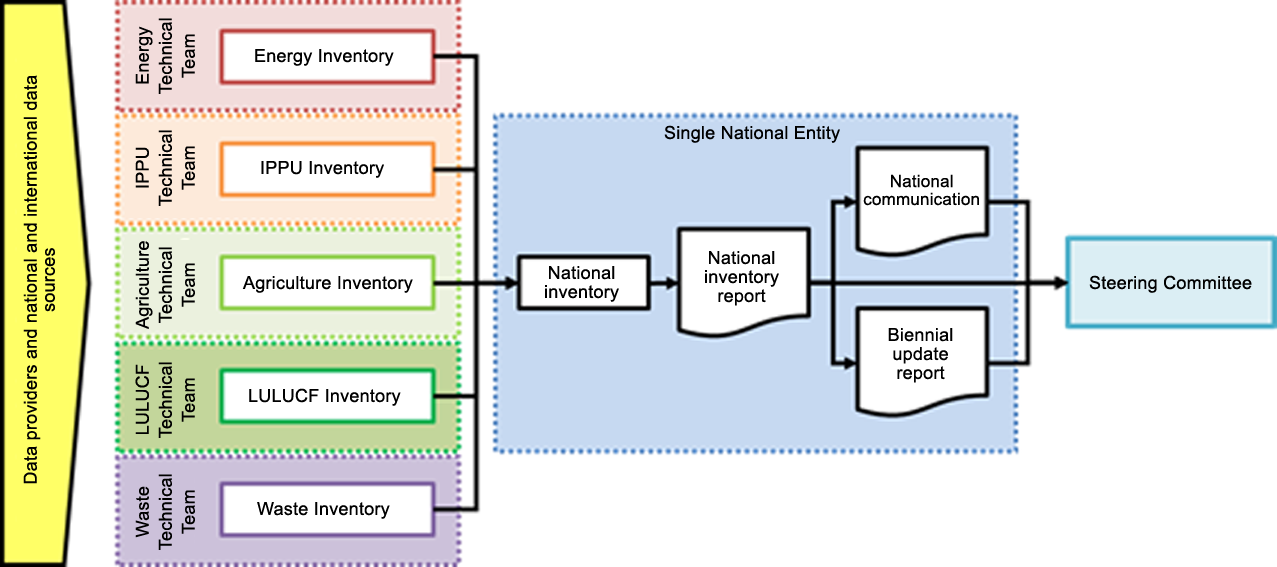
| ***Dataset*** | ***Description*** | ***Sector*** | ***Category*** | ***Provider*** |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Note:

Source: [], based on *2019 Refinement*.

**Figure 1-3.**

Data flow diagram between datasets



Note:

Source: [illustrative data flow diagram of Guatemala's inventory]

[In addition to the recommendations mentioned above, it is advisable to indicate where and how emission factors and activity data, all documentation about generating and aggregating data, particularly quality assurance/quality control (QA/QC), review results and planned inventory improvements are archived]

* + 1. **Processes for official consideration and approval of inventory**

MPG: provision 19d.

[Include a detailed description of the processes for the official consideration and approval of the inventory by the relevant parties, especially high-level authorities]

* 1. **General description of methodologies and data sources**

MPG: provisions 17, 20-24, 39 and 40.

[Include a general description of the methodologies (*2006 IPCC Guidelines*, *2013 Supplement for Wetlands*, *2019 Refinement*, or any subsequent version of the guidelines approved by the CMA), methods and data sources used to update the inventory, and the tool and technologies used when estimating GHGs (spreadsheets, IPCC software, other software, etc.). Detailed information on methods and data sources can be included in the sector or category sections]

[If a country is unable to adopt a higher tier method for a specific key category due to lack of resources, the country can use a tier 1 approach. In such cases, the country should clearly document why the methodological choice was not in line with the corresponding decision tree of the *2006 IPCC Guidelines*. It is recommended to include more information on these matters with regard to categories, specifically improvement plans]

[Include a summary table for the methods applied by category and sector. The example below is based on the **Summary3** spreadsheet of the CRT. Please, take into account that this table is part of the CRT and, thus, the country may also quote it directly in this document]

**Table 1-3.**

Summary report for methods applied to [country] inventory

| ***Code*** | ***GHG source and sink categories*** | ***CO2*** | | ***CH4*** | | ***N2O*** | | ***HFC*** | | ***PFC*** | | ***SF6*** | | ***NF3*** | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Method*** | ***Emission Factor*** | ***Method*** | ***Emission Factor*** | ***Method*** | ***Emission Factor*** | ***Method*** | ***Emission Factor*** | ***Method*** | ***Emission Factor*** | ***Method*** | ***Emission Factor*** | ***Method*** | ***Emission Factor*** |
| **1.** | **Energy** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.A. | Fuel combustion |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.A.1. | Energy industries |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.A.2. | Manufacturing industries and construction |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.A.3. | Transport |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.A.4. | Other sectors |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.A.5. | Other (please specify) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.B. | Fugitive emissions from fuels |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.B.1. | Solid fuels |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.B.2. | Oil and natural gas and other emissions from energy production |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.C. | CO2 transport and storage |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **2.** | **Industrial processes and product use** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.A. | Mineral industry |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.B. | Chemical industry |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.C. | Metal industry |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.D. | Non-energy products from fuels and solvent use |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.E. | Electronic industry |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.F. | Product uses as substitutes for ODS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.G. | Other product manufacture and use |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.H. | Other (please specify) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **3.** | **Agriculture** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.A. | Enteric fermentation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.B. | Manure management |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.C. | Rice cultivation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.D. | Agricultural soils |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.E. | Prescribed burning of savannahs |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.F. | Field burning of agricultural residues |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.G. | Liming |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.H. | Urea application |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.I. | Other carbon-containing fertilizers |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.J. | Other (please specify) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **4.** | **Land use, land-use change and forestry** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4.A. | Forest land |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4.B. | Cropland |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4.C. | Grassland |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4.D. | Wetlands |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4.E. | Settlements |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4.F. | Other land |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4.G. | Harvested wood products |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4.H. | Other (please specify) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **5.** | **Waste** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5.A. | Solid waste disposal |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5.B. | Biological treatment of solid waste |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5.C. | Incineration and open burning of waste |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5.D. | Wastewater treatment and discharge |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5.E. | Other (please specify) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **6.** | **Other (please specify)** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | ***Memo items*** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.D.1. | International bunkers |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.D.1.a. | Aviation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.D.1.b. | Navigation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.D.2. | Multilateral operations |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.D.3. | CO2 emissions from biomass |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.D.4. | CO2 captured |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5.F.1. | Long-term storage of C in waste disposal sites |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Indirect N2O |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Indirect CO2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Notes:

* Use the following notation keys to specify the method applied: D = IPCC default; T1 = IPCC tier 1; T1a, T1b, T1c = IPCC tier 1a, tier 1b and tier 1c, respectively; T2 = IPCC tier 2; T3 = IPCC tier 3; CR = CORINAIR; CS = country-specific; M = model; RA = reference approach; OTH = other.
* Use the following notation keys to specify the emission factor applied: D = IPCC default; CR = CORINAIR; CS = country-specific; M = model; PS = plant-specific; OTH = other.

Source: [], based on the **Summary3** spreadsheet of the CRT.

* 1. **Description of key categories**

MPG: provisions 25, 41 and 42. Provision 25 offers flexibility to countries that may need it.

[As deemed appropriate by the country, include a theoretical description of what is understood by key categories pursuant to the *2006 IPCC Guidelines*][[8]](#footnote-8)

[It is good practice to clearly document the results of the key category analysis. Inventory compilers should list the criteria by which each category was identified as key (for example, level, trend, or qualitative), and the method used to conduct the quantitative key category analysis (for example, Approach 1 or Approach 2) for the starting year and the latest reporting year, including and excluding the LULUCF categories]

[Include a brief description of the key category identification results (for example, indicate how the key category analysis provides inputs for the improvement plan and the identification of capacity-building needs). More details on the methodology used for individual and cumulative percentage contributions from key categories, for both level and trend, as well as tables where key categories were calculated may be included in Annex I]

[Include a summary table for key categories identified for the starting year and the latest reporting year (by level and trend, including and excluding LULUCF). The example below is based on the **Table7** spreadsheet of the CRT. Please take into account that this table is part of the CRT and, thus, the country may also quote it directly in this document. Notation keys: L = key category according to level assessment; T = key category according to trend assessment; and Q = key category according to qualitative criteria; should be used to describe the assessment method used. The approach used to identify the key category should be included as L1, L2, T1 or T2. In the column for comments, reasons for the qualitative assessment can be provided]

[Those developing countries that need flexibility with respect to provision 25 can instead identify key categories using a threshold no lower than 85 per cent in place of the 95 per cent threshold defined in the IPCC guidelines, allowing a focus on improving fewer categories and prioritizing resources]

**Table 1-4.**

Summary of [year] key categories analysis approach [1, 2 or 1 and 2], [including or excluding] LULUCF

| ***Code*** | ***GHG source and sink key categories*** | ***GHG*** | ***Criteria used for identification*** | | ***Key category excluding LULUCF*** | ***Key category including LULUCF*** |
| --- | --- | --- | --- | --- | --- | --- |
| ***L*** | ***T*** |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
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Note:

Source: [], based on the **Table7** spreadsheet of the CRT.

* 1. **General description of the QA/QC plan and implementation**

MPG: provisions 34, 35 and 46. Provisions 34 and 35 offer flexibility to countries that may need it.

[As deemed appropriate by the country, include a theoretical description of what is understood by quality assurance and quality control (QA/QC) and QA/QC plan pursuant to the *2006 IPCC Guidelines*][[9]](#footnote-9)

[QA/QC is an essential part of the system to maintain and increase inventory quality. Pursuant to the *2006 IPCC Guidelines*, *quality control* is a system of routine technical activities, to measure and control the quality of the inventory as it is being developed. It is performed by personnel compiling the inventory. *Quality assurance* is a planned system of review procedures conducted by personnel not directly involved in the inventory development process. *Verification* refers to the collection of activities and procedures conducted during the planning and development, or after completion of an inventory that can help to establish its reliability for the intended applications of the inventory]

[In line with the *2006 IPCC Guidelines*, a QA/QC plan is a fundamental element of the QA/QC system. The plan should, in general, outline the QA/QC activities that will be implemented and the institutional arrangements and responsibilities for implementing those activities. The plan should include a scheduled time frame for the QA/QC activities that follows inventory preparation from its initial development through to final reporting in any year. The QA/QC plan is an internal document to organize and implement QA/QC activities that ensure the inventory is fit for purpose and allow for improvement. Once developed, it can be referenced and used in subsequent inventory preparation, or modified as appropriate]

[Therefore, include a detailed description of the following components: a) inventory QA/QC plan prepared and implemented; b) agency responsible for implementing QA/QC; c) general inventory QC procedures implemented pursuant to the QA/QC plan; d) specific QC procedures for key categories and for those individual categories in which significant methodological changes or data revisions have occurred; e) implemented QA procedures, such as basic expert reviews of inventories (peer review); f) log of implemented QA/QC activities with reference to associated documentation and findings; g) inventory improvement plan containing potential, planned and implemented improvements; and h) how confidential information was treated (for example, to protect the confidentiality of business and military information, data cannot be fully disaggregated)]

[Those developing countries that need flexibility with respect to provision 34 are instead encouraged to prepare a QA/QC plan including information on the inventory agency responsible for implementing QA/QC. With respect to provision 35, countries are instead encouraged to implement and provide information on general inventory QC procedures in accordance with its QA/QC plan]

[The country may document and archive, in a tabular format, all information related to the QA/QC plan, general and specific QC activities implemented, QA activities implemented, and the inventory improvement plan. The tables and other detailed information may be included in Annex IV]

* 1. **General uncertainty assessment**

MPG: provisions 29 and 44. Provision 29 offers flexibility to countries that may need it.

[As deemed appropriate by the country, include a theoretical description of what is understood by uncertainty pursuant to the *2006 IPCC Guidelines*][[10]](#footnote-10)

[Include the quantitative estimate and qualitative discussion of the uncertainty of the emission and removal estimates for all source and sink categories, including inventory totals, for at least the starting year and the latest reporting year of the inventory time series. The country should also estimate the trend uncertainty of emission and removal estimates for all source and sink categories, including totals, between the starting year and the latest reporting year of the inventory time series using at least approach 1, as provided in the IPCC guidelines]

[Those developing countries that need flexibility with respect to provision 29 have the flexibility to instead provide, at a minimum, a qualitative discussion of uncertainty for key categories where quantitative input data are unavailable to quantitatively estimate uncertainties, and are encouraged to provide a quantitative estimate of uncertainty for all source and sink categories of the GHG inventory]

[Include a description of the general uncertainty assessment result at the country and sector level (for example, indicate how the general uncertainty assessment provides inputs for the improvement plan and the identification of capacity-building needs). More details on the methodology used, including summary tables for uncertainty by sector or national total may be included in Annex II]

* 1. **General assessment of completeness**
     1. **Information on completeness**

MPG: provisions 30, 31, 33, 45 and 48. Provision 48 offers flexibility to countries that may need it.

[As deemed appropriate by the country, include a theoretical description of what is understood by completeness pursuant to the *2006 IPCC Guidelines*]

[Pursuant to the *2006 IPCC Guidelines*, estimates for all relevant source and sink and gases categories are reported in the inventories. In cases where data is not considered, clearly document and explain the reason for such exclusion]

[Include information on sources and sinks (categories, pools and gases) not estimated (NE) in the inventory but for which estimation methods are included in the IPCC guidelines also explain the reason for such exclusion. Include information on sources and sinks identified as included elsewhere (IE). In addition, include information on the geographical coverage of the inventory and identify if any territory was excluded from the inventory and the reason for such exclusion]

[Keep in mind that each country shall report on CO2, CH4, N2O, HFC, PFC, SF6 and NF3. Those developing countries that need flexibility with respect to provision 48 may instead report on CO2, CH4, and N2O as well as any of the additional four fluorinated gases that are included in the country’s nationally determined contribution (NDC), are covered by an activity under Article 6 of the Paris Agreement or have been previously reported].

[The country may include summary tables for GHG sources and sinks that have not been estimated and for GHG sources and sinks included elsewhere. The table below is an illustrative example. Please, take into account that these tables are part of the **Table9** spreadsheet of the CRT and, thus, the country may also quote them directly in this document]

**Table 1-5.**

[Country] GHG inventory sources and sinks not estimated

| ***GHG*** | ***Sector*** | ***GHG source and sink categories***  ***(CRT code)*** | ***Explanation or comment*** |
| --- | --- | --- | --- |
| CO2 |  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
| CH4 |  |  |  |
|  |  |  |
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|  |  |  |
| N2O |  |  |  |
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| HFC |  |  |  |
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|  |  |  |
| PFC |  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
| Unspecified mix of HFCs and PFCs |  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
| SF6 |  |  |  |
|  |  |  |
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|  |  |  |
|  |  |  |
| NF3 |  |  |  |
|  |  |  |
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|  |  |  |

Note:

Source: [], based on the **Table9** spreadsheet of the CRT.

**Table 1-6.**

[Country] GHG inventory sources and sinks included elsewhere

| ***GHG*** | ***GHG source and sink categories*** | ***Allocation as per 2006 IPCC Guidelines*** | ***Allocation used by the country*** | ***Explanation or comment*** |
| --- | --- | --- | --- | --- |
| CO2 |  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| CH4 |  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| N2O |  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| HFC |  |  |  |  |
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|  |  |  |  |
|  |  |  |  |
| PFC |  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Unspecified mix of HFCs and PFCs |  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| SF6 |  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| NF3 |  |  |  |  |
|  |  |  |  |
|  |  |  |  |
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|  |  |  |  |

Note:

Source: [], based on the **Table9** spreadsheet of the CRT.

[Once emissions or removals have been estimated for a category and if they continue to occur, each country shall report them in subsequent submissions]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the completeness of the country inventory. For example, how assessment of completeness may identify priorities for inventory improvement and capacity-building needs]

* + 1. **Description of insignificant categories**

MPG: provision 32. Provision 32 offers flexibility to countries that may need it.

[Include a detailed list of categories considered insignificant and their specific contribution. Pursuant to the MPG (provision 32), each country may use the notation key “NE” (not estimated) when the estimates would be insignificant in terms of level according to the following considerations: emissions from a category should only be considered insignificant if the likely level of emissions is below 0.05 per cent of the national total GHG emissions, excluding LULUCF, or 500 kt CO2 eq, whichever is lower. The total national aggregate of estimated emissions for all gases from categories considered insignificant shall remain below 0.1 per cent of the national total GHG emissions, excluding LULUCF. Countries should use approximated activity data and default IPCC emission factors to derive a likely level of emissions for the respective category]

[Those developing countries that need flexibility with respect to provision 32, may consider emissions insignificant if the likely level of emissions is below 0.1 per cent of the national total GHG emissions, excluding LULUCF, or 1,000 kt CO2 eq, whichever is lower. In this case, the total national aggregate of estimated emissions for all gases from categories considered insignificant shall remain below 0.2 per cent of the total GHG emissions, excluding LULUCF]

* + 1. **Total aggregate emissions considered insignificant**

MPG: provision 32. Provision 32 offers flexibility to countries that may need it.

[Include a description, using a table, of the total national aggregate for categories considered insignificant]

[Include a summary table for categories considered insignificant. The table below is an illustrative example, please take into account that it may change significantly depending on the national circumstances]

**Table 1-7.**

Summary of categories considered insignificant

| ***Code*** | ***GHG source and sink categories*** | ***Emissions or removals of latest year***  ***(kt CO2 eq)*** | ***Absolute value of emissions and removals of latest year***  ***(kt CO2 eq)*** | ***Level assessment as compared to national total***  ***(%)*** | ***Total aggregate of insignificant categories (%)*** |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |
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|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  | **Total** |  |  |  |  |
|  | **Percentage of national total** |  |  |  |  |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the insignificant categories of the national GHG inventory]

* 1. **Metrics**

MPG: provision 37.

[Include a description of 100-year time-horizon global warming potential (GWP) values from the *IPCC Fifth Assessment Report* used to report aggregate emissions and removals of GHGs, expressed in carbon dioxide equivalent (CO2 eq). Each country may in addition also use other metrics (for example, global temperature potential) to report supplemental information on aggregate emissions and removals of GHGs, expressed in CO2 eq]

[Include a table with GWP values. The table below is an illustrative example, please take into account that the table should contain only gases reported by the country]

**Table 1-8.**

Global warming potential and global temperature potential used in the inventory, values for a 100-year time-horizon

| ***Trade or common name*** | ***Chemical formula*** | ***Global warming potential*** | ***Global temperature potential*** |
| --- | --- | --- | --- |
| Carbon dioxide | CO2 | 1 | 1 |
| Methane | CH4 | 28 | 4 |
| Fossil methane | CH4 | 30 | 6 |
| Nitrous oxide | N2O | 265 | 234 |
| HFC-23 | CHF3 | 12,400 | 12,700 |
| HFC-32 | CH2F2 | 677 | 94 |
| HFC-41 | CH3F2 | 116 | 16 |
| HFC-125 | CHF2CF3 | 3,170 | 967 |
| HFC-134 | CHF2CHF2 | 1,120 | 160 |
| HFC-134a | CH2FCF3 | 1,300 | 201 |
| HFC-143 | CH2FCHF2 | 328 | 46 |
| HFC-143a | CH3CF3 | 4,800 | 2,500 |
| HFC-152 | CH2FCH2F | 16 | 2 |
| HFC-152a | CH3CHF2 | 138 | 19 |
| HFC-161 | CH3CH2F | 4 | <1 |
| HFC-227ea | CF3CHFCF3 | 3,350 | 1,460 |
| HFC-236cb | CH2FCF2CF3 | 1,210 | 185 |
| HFC-236ea | CHF2CHFCF3 | 1,330 | 195 |
| HFC-236fa | CF3CH2CF3 | 8,060 | 8,380 |
| HFC-245ca | CH2FCF2CHF2 | 716 | 100 |
| HFC-245fa | CH2FCF2CHF2 | 858 | 121 |
| HFC-365mfc | CH3CF2CH2CF3 | 804 | 114 |
| HFC-43-10mee | CF3CHFCHFCF2CF3 | 1,650 | 281 |
| Sulfur hexafluoride | SF6 | 23,500 | 28,200 |
| Nitrogen trifluoride | NF3 | 16,100 | 18,100 |
| PFC-14 | CF4 | 6,630 | 8,040 |
| PFC-116 | C2F6 | 11,100 | 13,500 |
| PFC-218 | C3F8 | 8,900 | 10,700 |
| PFC-318 | c-C4F8 | 9,540 | 11,500 |
| PFC-31-10 | C4F10 | 9,200 | 11,000 |
| PFC-41-12 | C5F12 | 8,550 | 10,300 |
| PFC-51-14 | C6F14 | 7,910 | 9,490 |
| PCF-91-18 | C10F18 | 7,190 | 8,570 |
| Trifluoromethyl sulfur pentafluoride | SF5CF3 | 17,400 | 20,200 |
| PFC-c216 | c-C3F6 | 9,200 | 11,000 |
| HFE-125 | CHF2OCF3 | 12,400 | 10,900 |
| HFE-134 | CHF2OCHF2 | 5,560 | 1,430 |
| HFE-143a | CH3OCF3 | 523 | 73 |
| HCFE-235da2 | CHF2OCHClCF3 | 491 | 68 |
| HFE-245cb2 | CH3OCF2CF3 | 654 | 91 |
| HFE-245fa2 | CHF2OCH2CF3 | 812 | 114 |
| HFE-347mcc3 | CH3OCF2CF2CF3 | 530 | 74 |
| HFE-347pcf2 | CHF2CF2OCH2CF3 | 889 | 124 |
| HFE-356pcc3 | CH3OCF2CF2CHF2 | 413 | 57 |
| HFE-449sl (HFE-7100) | C4F9OCH3 | 421 | 59 |
| HFE-569sf2 (HFE-7200) | C4F9OC2H5 | 57 | 8 |
| HFE-43-10pccc124 (H-Galden 1040x) | CHF2OCF2OC2F4OCHF2 | 2,820 | 436 |
| HFE-236ca12 (HG-10) | CHF2OCF2OCHF2 | 5,350 | 1,420 |
| HFE-338pcc13 (HG-01) | CHF2OCF2CF2OCHF2 | 2,910 | 442 |
| HFE-227ea | CF3CHFOCF3 | 6,450 | 3,630 |
| HFE-236ea2 | CHF2OCHFCF3 | 1,790 | 260 |
| HFE-236fa | CF3CH2OCF3 | 979 | 138 |
| HFE-245fa1 | CHF2CH2OCF3 | 828 | 116 |
| HFE 263fb2 | CF3CH2OCH3 | 1 | <1 |
| HFE-329mcc2 | CHF2CF2OCF2CF3 | 3,070 | 718 |
| HFE-338mcf2 | CF3CH2OCF2CF3 | 929 | 131 |
| HFE-347mcf2 | CHF2CH2OCF2CF3 | 854 | 120 |
| HFE-356mec3 | CH3OCF2CHFCF3 | 387 | 54 |
| HFE-356pcf2 | CHF2CH2OCF2CHF2 | 719 | 101 |
| HFE-356pcf3 | CHF2OCH2CF2CHF2 | 446 | 62 |
| HFE 365mcf3 | CF3CF2CH2OCH3 | <1 | <1 |
| HFE-374pc2 | CHF2CF2OCH2CH3 | 627 | 88 |
| PFPMIE | CF3OCF(CF3)CF2OCF2OCF3 | 9,710 | 11,300 |
| Chloroform | CHCl3 | 16 | 2 |
| Methylene chloride | CH2Cl2 | 9 | 1 |
| Methyl chloride | CH3Cl | 12 | 2 |
| Halon-1201 | CHBrF2 | 376 | 52 |

Note:

Source: IPCC Fifth Assessment Report (AR5)

* 1. **Summary of any flexibility applied[[11]](#footnote-11)**

MPG: provisions 4-6.

[As deemed appropriate by the country, include a theoretical description of what is understood by flexibility pursuant to the MPG]

[Clearly indicate the provisions to which flexibility is applied, concisely clarify capacity constraints, noting that some constraints may be relevant to several provisions, and provide self-determined estimated time frames for improvements in relation to those capacity constraints]

[Include a summary table on the specific flexibility provisions applied. Please take into account that the illustrative example below is part of the **Flex\_Summary** spreadsheet of the CRT and, thus, the country may also quote it directly in this document]

**Table 1-9.**

Summary of the flexibility provisions applied

| ***MPG flexibility provision*** | ***Year*** | ***Sector*** | ***Category*** | ***Gas*** | ***Description of the application of flexibility*** | ***Clarification of capacity constraint*** | ***Time frame for improvement*** | ***Progress made in addressing areas of improvement*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
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Note:

Source: [], based on the **Flex\_Summary** spreadsheet of the CRT.

1. **TRENDS IN GREENHOUSE GAS EMISSIONS AND REMOVALS**
   1. **Description of trend for aggregated GHG emissions and removals**

MPG: provisions 47, 48, 50-53 and 58. Provisions 48 and 58 offer flexibility to countries that may need it.

[Include a descriptive summary on the national GHG inventory of the latest reporting year, including all GHGs (CO2, CH4, N2O, HFC, PFC, SF6 and NF3), all sectors (Energy, IPPU, Agriculture, LULUCF and Waste) and their categories, all precursor gases (NOx, CO, NMVOCand SOx), indirect CO2 and N2O emissions, and all memo items]

[Those developing countries that need flexibility with respect to provision 48 may instead report on CO2, CH4, and N2O as well as any of the additional four fluorinated gases that are included in the country’s nationally determined contribution (NDC), are covered by an activity under Article 6 of the Paris Agreement, or have been previously reported. In addition, pursuant to provision 58, developing countries have the flexibility to instead have their latest reporting year as three years prior to the submission of their NIR]

[Include summary tables on the national GHG inventory of the latest reporting year. Summary tables for the rest of the years of the time series are included in the CRT and may be part of the annexes to this document. Tables may include all sectors, categories and gases—on a gas-by-gas basis in units of mass at the most disaggregated level (kt for GHGs and precursors and kt CO2 eq for fluorinated gases and totals per sector and category)—indirect CO2 emissions included and excluded from the national total, memo items (indirect N2O emissions and international aviation and marine bunker fuel emissions) and national totals with and without LULUCF]

[The tables below are illustrative examples based on the **Summary1** and **Summary2** spreadsheets of the CRT. Please, take into account that these tables are part of the CRT and, thus, the country may also quote them directly in this document]

**Table 2-1.**

Summary for the national GHG inventory [latest inventory year] by sectors and categories

| ***Code*** | ***GHG source and sink categories*** | ***Net CO2*** ***(kt)*** | ***CH4***  ***(kt)*** | ***N2O***  ***(kt)*** | ***HFC*** ***(kt CO2 eq)*** | ***PFC*** ***(kt CO2 eq)*** | ***Unspecified mix of HFCs and PFCs*** ***(kt CO2 eq)*** | ***SF6***  ***(kt)*** | ***NF3*** ***(kt)*** | ***NOx***  ***(kt)*** | ***CO***  ***(kt)*** | ***NMVOC*** ***(kt)*** | ***SOX***  ***(kt)*** | ***Total GHG***  ***(kt CO2 eq)*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Total national emissions and removals** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **1.** | **Energy** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.A. | Fuel combustion |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.A.1. | Energy industries |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.A.2. | Manufacturing industries and construction |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.A.3. | Transport |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.A.4. | Other sectors |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.A.5. | Other |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.B. | Fugitive emissions from fuels |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.B.1. | Solid fuels |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.B.2. | Oil and natural gas and other emissions from energy production |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.C. | CO2 transport and storage |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **2.** | **Industrial processes and product use** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.A. | Mineral industry |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.B. | Chemical industry |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.C. | Metal industry |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.D. | Non-energy products from fuels and solvent use |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.E. | Electronic industry |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.F. | Product uses as substitutes for ODS |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.G. | Other product manufacture and use |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.H. | Other (please specify) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **3.** | **Agriculture** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.A. | Enteric fermentation |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.B. | Manure management |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.C. | Rice cultivation |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.D. | Agricultural soils |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.E. | Prescribed burning of savannahs |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.F. | Field burning of agricultural residues |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.G. | Liming |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.H. | Urea application |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.I. | Other carbon-containing fertilizers |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.J. | Other (please specify) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **4.** | **Land use, land-use change and forestry** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4.A. | Forest land |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4.B. | Cropland |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4.C. | Grassland |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4.D. | Wetlands |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4.E. | Settlements |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4.F. | Other land |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4.G. | Harvested wood products |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4.H. | Other (please specify) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **5.** | **Waste** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5.A. | Solid waste disposal |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5.B. | Biological treatment of solid waste |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5.C. | Incineration and open burning of waste |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5.D. | Wastewater treatment and discharge |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5.E. | Other (please specify) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **6.** | **Other (please specify)** |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | ***Memo items*** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.D.1. | International bunkers |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.D.1.a. | Aviation |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.D.1.b. | Navigation |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.D.2. | Multilateral operations |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.D.3. | CO2 emissions from biomass |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1.D.4. | CO2 captured |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5.F.1. | Long-term storage of C in waste disposal sites |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Indirect N2O |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Indirect CO2 |  |  |  |  |  |  |  |  |  |  |  |  |  |

Note: Use the following notation keys where numerical data are not available: NA = not applicable; NE = not estimated; NO = not occurring; IE = included elsewhere; C = confidential.

Source: [], based on the **Summary1** spreadsheet of the CRT.

**Table 2-2.**

Summary for the national GHG inventory [latest inventory year] by sectors and categories

| ***Code*** | ***GHG source and sink categories*** | ***CO2*** ***(kt CO2 eq)*** | ***CH4***  ***(kt CO2 eq)*** | ***N2O***  ***(kt CO2 eq)*** | ***HFC*** ***(kt CO2 eq)*** | ***PFC*** ***(kt CO2 eq)*** | ***Unspecified mix of HFCs and PFCs*** ***(kt CO2 eq)*** | ***SF6***  ***(kt CO2 eq)*** | ***NF3*** ***(kt CO2 eq)*** | | ***Total GHG***  ***(kt CO2 eq)*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Total (net emissions)** |  |  |  |  |  |  |  |  | |  |
| **1.** | **Energy** |  |  |  |  |  |  |  |  | |  |
| 1.A. | Fuel combustion |  |  |  |  |  |  |  |  | |  |
| 1.A.1. | Energy industries |  |  |  |  |  |  |  |  | |  |
| 1.A.2. | Manufacturing industries and construction |  |  |  |  |  |  |  |  | |  |
| 1.A.3. | Transport |  |  |  |  |  |  |  |  | |  |
| 1.A.4. | Other sectors |  |  |  |  |  |  |  |  | |  |
| 1.A.5. | Other |  |  |  |  |  |  |  |  | |  |
| 1.B. | Fugitive emissions from fuels |  |  |  |  |  |  |  |  | |  |
| 1.B.1. | Solid fuels |  |  |  |  |  |  |  |  | |  |
| 1.B.2. | Oil and natural gas and other emissions from energy production |  |  |  |  |  |  |  |  | |  |
| 1.C. | CO2 transport and storage |  |  |  |  |  |  |  |  | |  |
| **2.** | **Industrial processes and product use** |  |  |  |  |  |  |  |  | |  |
| 2.A. | Mineral industry |  |  |  |  |  |  |  |  | |  |
| 2.B. | Chemical industry |  |  |  |  |  |  |  |  | |  |
| 2.C. | Metal industry |  |  |  |  |  |  |  |  | |  |
| 2.D. | Non-energy products from fuels and solvent use |  |  |  |  |  |  |  |  | |  |
| 2.E. | Electronic industry |  |  |  |  |  |  |  |  | |  |
| 2.F. | Product uses as substitutes for ODS |  |  |  |  |  |  |  |  | |  |
| 2.G. | Other product manufacture and use |  |  |  |  |  |  |  |  | |  |
| 2.H. | Other (please specify) |  |  |  |  |  |  |  |  | |  |
| **3.** | **Agriculture** |  |  |  |  |  |  |  |  | |  |
| 3.A. | Enteric fermentation |  |  |  |  |  |  |  |  | |  |
| 3.B. | Manure management |  |  |  |  |  |  |  |  | |  |
| 3.C. | Rice cultivation |  |  |  |  |  |  |  |  | |  |
| 3.D. | Agricultural soils |  |  |  |  |  |  |  |  | |  |
| 3.E. | Prescribed burning of savannahs |  |  |  |  |  |  |  |  | |  |
| 3.F. | Field burning of agricultural residues |  |  |  |  |  |  |  |  | |  |
| 3.G. | Liming |  |  |  |  |  |  |  |  | |  |
| 3.H. | Urea application |  |  |  |  |  |  |  |  | |  |
| 3.I. | Other carbon-containing fertilizers |  |  |  |  |  |  |  |  | |  |
| 3.J. | Other (please specify) |  |  |  |  |  |  |  |  | |  |
| **4.** | **Land use, land-use change and forestry** |  |  |  |  |  |  |  |  | |  |
| 4.A. | Forest land |  |  |  |  |  |  |  |  | |  |
| 4.B. | Cropland |  |  |  |  |  |  |  |  | |  |
| 4.C. | Grassland |  |  |  |  |  |  |  |  | |  |
| 4.D. | Wetlands |  |  |  |  |  |  |  |  | |  |
| 4.E. | Settlements |  |  |  |  |  |  |  |  | |  |
| 4.F. | Other land |  |  |  |  |  |  |  |  | |  |
| 4.G. | Harvested wood products |  |  |  |  |  |  |  |  | |  |
| 4.H. | Other (please specify) |  |  |  |  |  |  |  |  | |  |
| **5.** | **Waste** |  |  |  |  |  |  |  |  | |  |
| 5.A. | Solid waste disposal |  |  |  |  |  |  |  |  | |  |
| 5.B. | Biological treatment of solid waste |  |  |  |  |  |  |  |  | |  |
| 5.C. | Incineration and open burning of waste |  |  |  |  |  |  |  |  | |  |
| 5.D. | Wastewater treatment and discharge |  |  |  |  |  |  |  |  | |  |
| 5.E. | Other (please specify) |  |  |  |  |  |  |  |  | |  |
| **6.** | **Other (please specify)** |  |  |  |  |  |  |  |  | |  |
|  |  |  |  |  |  |  |  |  |  | |  |
|  | ***Memo items*** |  |  |  |  |  |  |  |  | |  |
| 1.D.1. | International bunkers |  |  |  |  |  |  |  |  | |  |
| 1.D.1.a. | Aviation |  |  |  |  |  |  |  |  | |  |
| 1.D.1.b. | Navigation |  |  |  |  |  |  |  |  | |  |
| 1.D.2. | Multilateral operations |  |  |  |  |  |  |  |  | |  |
| 1.D.3. | CO2 emissions from biomass |  |  |  |  |  |  |  |  | |  |
| 1.D.4. | CO2 captured |  |  |  |  |  |  |  |  | |  |
| 5.F.1. | Long-term storage of C in waste disposal sites |  |  |  |  |  |  |  |  | |  |
|  | Indirect N2O |  |  |  |  |  |  |  |  | |  |
|  |  |  |  |  |  |  |  |  |  | |  |
|  | Indirect CO2 |  |  |  |  |  |  |  |  | |  |
|  |  |  |  |  |  |  |  |  |  | |  |
| **Total CO2 equivalent emissions without LULUCF** | | | | | | | | | |  | |
| **Total CO2 equivalent emissions with LULUCF** | | | | | | | | | |  | |
| **Total CO2 equivalent emissions, including indirect CO2, without LULUCF** | | | | | | | | | |  | |
| **Total CO2 equivalent emissions, including indirect CO2, with LULUCF** | | | | | | | | | |  | |

Note: Use the following notation keys where numerical data are not available: NA = not applicable; NE = not estimated; NO = not occurring; IE = included elsewhere; C = confidential.

Source: [], based on the **Summary2** spreadsheet of the CRT.

* 1. **Description of trend by sector and gas**
     1. **Description of trend by sector**

MPG: provisions 47, 48, 50, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

[Include a descriptive summary of the **country total net GHGs** (with LULUCF), in kt CO2 eq, and an explanation on: (1) emissions and removals of the latest inventory year, and their key drivers; (2) percentage contribution of each sector in the latest inventory year; (3) variation between the base year and the latest inventory year, and its key drivers; (4) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (5) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Those developing countries that need flexibility with respect to provision 57 can instead report data covering, at a minimum, the reference year/period for their NDC and, in addition, a consistent annual time series from at least 2020 onwards]

[Include a summary table for the total net GHGs of the country inventory by sector (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 2-3.**

[Country] inventory: net GHG emissions by sector (kt CO2 eq)

| ***Sector*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Energy | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| IPPU | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Agriculture | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| LULUCF | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Waste | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total net** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source: [], based on the **Table10s6** spreadsheet of the CRT.

[Include a summary figure of total net GHGs of the country inventory by sector (in kt CO2 eq), 1990-2022]

**Figure 2-1.**

[Country] inventory: total net GHG by sector (kt CO2 eq), 1990 -2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the trend of total net GHGs in the country inventory by sector]

[Include a descriptive summary of the **country's total GHG emissions** (without LULUCF), in kt CO2 eq, and an explanation on: (1) emissions of the latest inventory year, and their key drivers; (2) percentage contribution of each sector in the latest inventory year; (3) variation between the base year and the latest inventory year, and its key drivers; (4) variation compared to the latest inventory year of the previous inventory, and its key drivers; and (5) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total GHGs of the country inventory by sector (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 2-4.**

[Country] inventory: total GHGs by sector (kt CO2 eq)

| ***Sector*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Energy | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| IPPU | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Agriculture | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Waste | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of total GHG emissions of the country inventory by sector (in kt CO2 eq), 1990-2022]

**Figure 2-2.**

[Country] inventory: total GHGs by sector (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the trend of total GHG emissions in the country inventory by sector]

* + 1. **Description of trend by greenhouse gas**

MPG: provisions 47, 48, 50, 52, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

[Include a summary table on each GHG of the country inventory (with and without LULUCF, with and without indirect CO2 emissions, in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 2-5.**

[Country] inventory: emissions and removals by GHG (kt CO2 eq)

| ***GHG*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| CO2: without net CO2 from LULUCF | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| CO2: with net CO2 from LULUCF | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| CH4: without CH4 from LULUCF | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| CH4: with CH4 from LULUCF | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| N2O: without N2O from LULUCF | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| N2O: with N2O from LULUCF | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| HFC | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| PFC | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Unspecified mix of HFCs and PFCs | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| SF6 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| NF3 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total (without LULUCF)** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |
| **Total net (with LULUCF)** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |
| **Total (without LULUCF, with indirect)** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |
| **Total net (with LULUCF, with indirect)** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note: Use the following notation keys where numerical data are not available: NA = not applicable; NE = not estimated; NO = not occurring; IE = included elsewhere; C = confidential.

Source: [], based on the **Table10s6** spreadsheet of the CRT.

[Include a descriptive summary for each GHG (CO2, CH4, N2O, HFC, PFC, NF3 and SF6), with LULUCF, with and without indirect CO2 emissions, in kt CO2 eq, and an explanation for each GHG on: (1) emissions or removals by GHG of the latest inventory year, and their key drivers; (2) percentage contribution of each GHG in the latest inventory year; (3) variation between the base year and the latest inventory year by GHG, and its key drivers; (4) variation compared to the latest inventory year of the previous inventory by GHG, and its key drivers; and (5) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year by GHG, and its key drivers]

[Include a summary figure of total net GHGs of the country inventory by GHG (kt CO2 eq), 1990-2022]

**Figure 2-3.**

[Country] inventory: total net GHGs on a gas-by-gas basis (kt CO2 eq), 1990 -2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include a descriptive summary for each GHG (CO2, CH4, N2O, HFC, PFC, SF6 and NF3), without LULUCF, with and without indirect CO2 emissions, in kt CO2 eq, and an explanation for each GHG on: (1) emissions by GHG of the latest inventory year, and their key drivers; (2) percentage contribution of each GHG in the latest inventory year; (3) variation between the base year and the latest inventory year by GHG, and its key drivers; (4) variation compared to the latest inventory year of the previous inventory by GHG, and its key drivers; and (5) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year by GHG, and its key drivers]

[Include a summary figure of total GHGs of the country inventory by GHG (kt CO2 eq), 1990-2022]

**Figure 2-4.**

[Country] inventory: total GHGs on a gas-by-gas basis (kt CO2 eq), 1990 -2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the GHG trend in the country inventory by GHG]

[The country may additionally include information on each GHG by sector or any other information considered relevant]

* 1. **Description of trend for precursor gas emissions**

MPG: provisions 47, 51, 57 and 58. Provisions 57 and 58 offer flexibility to countries that may need it.

[Include a brief descriptive summary of each precursor gas (CO, NOx, NMVOC and SOx), including for each precursor gas an explanation on: (1) emissions of the latest inventory year, and their key drivers; (2) percentage contribution of each precursor gas in the latest inventory year; (3) variation between the base year and the latest inventory year by precursor gas, and its key drivers; (4) variation compared to the latest inventory year of the previous inventory by precursor gas, and its key drivers; and (5) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year by precursor gas, and its key drivers]

[Include a summary table on each precursor gas of the country inventory. At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 2-6.**

[Country] inventory: emissions by precursor (kt)

| ***Precursor gas*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| CO | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| NOx | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| NMVOC | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| SOx | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of precursor gas emissions of the country inventory by precursor gas (kt), 1990-2022]

**Figure 2-5.**

[Country] inventory: total emissions by precursor (kt), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the trend in precursor gas emissions in the country inventory]

* 1. **Description of trend** **for other substances that have an impact on climate**

MPG: provision 52.

[If appropriate, the country may provide additional and complementary information on the trend in other substances that have an impact on climate for monitoring its NDC. For example, carbon black emissions, tropospheric ozone, particulate matter, other short-lived climate pollutants, etc.]

* 1. **Description of trend for GHG intensity indicators**

[If appropriate, the country may include any other description of the trend in GHG intensity indicators to provide additional information on its GHG emissions and removals that can be used consistently for monitoring the NDC. For example, GHG intensity per capita, GHG intensity per unit of gross domestic product, total or total net GHG at the subnational level, total or total net using other metrics (global temperature potential), etc.]

1. **ENERGY (CRT 1)**
   1. **Overview of the sector**

MPG: provisions 47, 48, 50, 51, 53, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

* + 1. **Description of the sector**

[Include a theoretical description of the sector, its categories or GHG sources pursuant to the *2006 IPCC Guidelines* only if deemed relevant. In addition, include a practical description of the sector in the country, indicating what categories or GHG sources are present, their relevance at the national level and a completeness summary]

* + 1. **Trend in the sector's GHG**

[Include the sector's report table for the latest inventory year by categories and subcategories, and an explanation on emissions by each GHG and precursor gas in the total emissions for the sector (kt for each GHG and precursor)]

**Table 3-1.**

Energy Sector: emissions by GHG, category and subcategory (kt) for [latest inventory year]

| ***Code*** | ***GHG source categories*** | ***CO2***  ***(kt)*** | ***CH4***  ***(kt)*** | ***N2O***  ***(kt)*** | ***NOx***  ***(kt)*** | ***CO***  ***(kt)*** | ***NMVOC*** ***(kt)*** | ***SOX***  ***(kt)*** | ***Total GHG***  ***(kt CO2 eq)*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **1.** | **Energy** |  |  |  |  |  |  |  |  |
| 1.A. | Fuel combustion |  |  |  |  |  |  |  |  |
| 1.A.1. | Energy industries |  |  |  |  |  |  |  |  |
| 1.A.1.a. | Public electricity and heat production |  |  |  |  |  |  |  |  |
| 1.A.1.b. | Petroleum refining |  |  |  |  |  |  |  |  |
| 1.A.1.c. | Manufacture of solid fuels and other energy industries |  |  |  |  |  |  |  |  |
| 1.A.2. | Manufacturing industries and construction |  |  |  |  |  |  |  |  |
| 1.A.2.a. | Iron and steel |  |  |  |  |  |  |  |  |
| 1.A.2.b. | Non-ferrous metals |  |  |  |  |  |  |  |  |
| 1.A.2.c. | Chemicals |  |  |  |  |  |  |  |  |
| 1.A.2.d. | Pulp, paper and print |  |  |  |  |  |  |  |  |
| 1.A.2.e. | Food processing, beverages and tobacco |  |  |  |  |  |  |  |  |
| 1.A.2.f. | Non-metallic minerals |  |  |  |  |  |  |  |  |
| 1.A.2.g. | Other (please specify) |  |  |  |  |  |  |  |  |
| 1.A.3. | Transport |  |  |  |  |  |  |  |  |
| 1.A.3.a. | Domestic aviation |  |  |  |  |  |  |  |  |
| 1.A.3.b. | Road transportation |  |  |  |  |  |  |  |  |
| 1.A.3.c. | Railways |  |  |  |  |  |  |  |  |
| 1.A.3.d. | Domestic navigation |  |  |  |  |  |  |  |  |
| 1.A.3.e. | Other transportation |  |  |  |  |  |  |  |  |
| 1.A.4. | Other sectors |  |  |  |  |  |  |  |  |
| 1.A.4.a. | Commercial/institutional |  |  |  |  |  |  |  |  |
| 1.A.4.b. | Residential |  |  |  |  |  |  |  |  |
| 1.A.4.c. | Agriculture/forestry/fishing |  |  |  |  |  |  |  |  |
| 1.A.5. | Other (not specified elsewhere) |  |  |  |  |  |  |  |  |
| 1.A.5.a. | Stationary |  |  |  |  |  |  |  |  |
| 1.A.5.b. | Mobile |  |  |  |  |  |  |  |  |
| 1.B. | Fugitive emissions from fuels |  |  |  |  |  |  |  |  |
| 1.B.1. | Solid fuels |  |  |  |  |  |  |  |  |
| 1.B.1.a. | Coal mining and handling |  |  |  |  |  |  |  |  |
| 1.B.1.b. | Fuel transformation |  |  |  |  |  |  |  |  |
| 1.B.1.c. | Other (please specify) |  |  |  |  |  |  |  |  |
| 1.B.2. | Oil and natural gas and other emissions from energy production |  |  |  |  |  |  |  |  |
| 1.B.2.a. | Oil |  |  |  |  |  |  |  |  |
| 1.B.2.b. | Natural gas |  |  |  |  |  |  |  |  |
| 1.B.2.c. | Venting and flaring |  |  |  |  |  |  |  |  |
| 1.B.2.d. | Other (please specify) |  |  |  |  |  |  |  |  |
| 1.C. | CO2 transport and storage |  |  |  |  |  |  |  |  |
| 1.C.1. | Transport of CO2 |  |  |  |  |  |  |  |  |
| 1.C.2. | Injection and storage |  |  |  |  |  |  |  |  |
| 1.C.3. | Other |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | ***Memo items*** |  |  |  |  |  |  |  |  |
| 1.D.1. | International bunkers |  |  |  |  |  |  |  |  |
| 1.D.1.a. | Aviation |  |  |  |  |  |  |  |  |
| 1.D.1.b. | Navigation |  |  |  |  |  |  |  |  |
| 1.D.2. | Multilateral operations |  |  |  |  |  |  |  |  |
| 1.D.3. | CO2 emissions from biomass |  |  |  |  |  |  |  |  |
| 1.D.4. | CO2 captured |  |  |  |  |  |  |  |  |
| 1.D.4.a. | For domestic storage |  |  |  |  |  |  |  |  |
| 1.D.4.b. | For storage in other countries |  |  |  |  |  |  |  |  |

Note: Use the following notation keys where numerical data are not available: NA = not applicable; NE = not estimated; NO = not occurring; IE = included elsewhere; C = confidential.

Source: [], based on the **Table1** spreadsheet of the CRT.

[Include a description of the sector's GHGs, in kt CO2 eq, and an explanation on: (1) percentage contribution of the sector to national total emissions and national total net emissions in the latest inventory year and its percentage change over time; (2) emissions of the latest inventory year, and their key drivers; (3) percentage contribution of each category or subcategory in the latest inventory year; (4) variation between the base year and the latest inventory year, and its key drivers; (5) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (6) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total GHG of the sector inventory by category or subcategory (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 3-2.**

Energy sector: total GHG emissions by category or subcategory (kt CO2 eq)

| ***Category*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source: [], based on the **Table10s1** spreadsheet of the CRT.

[Include a summary figure of total GHG emissions of the sector inventory by category or subcategory (in kt CO2 eq), 1990-2022]

**Figure 3-1.**

Energy sector: total GHG emissions by category or subcategory (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the sector trend]

[Include a description of each GHG (CO2, CH4 and N2O), in kt CO2 eq, and an explanation on: (1) emissions by GHG of the latest inventory year, and their key drivers; (2) percentage contribution of each GHG in the latest inventory year; (3) variation between the base year and the latest inventory year by GHG, and its key drivers; (4) variation compared to the latest inventory year of the previous inventory by GHG, and its key drivers; and (5) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year by GHG, and its key drivers]

[Include a summary table on each GHG of the sector inventory. At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 3-3.**

Energy sector: emissions by GHG (kt CO2 eq)

| ***GHG*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| CO2 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| CH4 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| N2O | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of each GHG of the sector inventory (kt CO2 eq), 1990-2022]

**Figure 3-2.**

Energy sector: emissions by GHG (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the GHG trend in the sector inventory by GHG]

[Include a very brief description of each precursor (NOx, CO, NMVOC and SOX), and an explanation on: (1) emissions by precursor of the latest inventory year, and their key drivers; (2) percentage contribution of each precursor in the latest inventory year; (3) variation between the base year and the latest inventory year by precursor, and its key drivers; (4) variation compared to the latest inventory year of the previous inventory by precursor, and its key drivers; and (5) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year by precursor, and its key drivers]

[Include a summary table on each precursor of the sector inventory. At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 3-4.**

Energy sector: emissions by precursor (kt)

| ***Precursor*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| NOx | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| CO | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| NMVOC | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| SOX | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of each precursor of the sector inventory (kt), 1990-2022]

**Figure 3-3.**

Energy sector: emissions by precursor (kt), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the precursor trend in the sector inventory by precursor]

[If appropriate, include a very brief description of each of the other substances that have an impact on climate (for example, carbon black emissions, tropospheric ozone, particulate matter, other short-lived climate pollutants, etc.), in kt, and an explanation on: (1) emissions by other substances of the latest inventory year, and their key drivers; (2) percentage contribution of other substances in the latest inventory year; (3) variation between the base year and the latest inventory year for other substances, and its key drivers; (4) variation compared to the latest inventory year of the previous inventory for other substances, and its key drivers; and (5) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year for other substances, and its key drivers]

[Include, if appropriate, a summary table on each of the other substances that have an impact on climate of the sector inventory. At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 3-5.**

Energy sector: emissions of other substances that have an impact on climate (kt)

| ***Substance*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include, if appropriate, a figure summary on each of the other substances that have an impact on climate of the sector inventory (kt), 1990-2022]

**Figure 3-4.**

Energy sector: emissions of other substances that have an impact on climate (kt), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include, if appropriate, any conclusion or relevant aspect that the country may want to highlight pertaining to the trend in other substances that have an impact on climate of the sector inventory by substance]

* + 1. **General methodological issues of the sector**

MPG: provisions 17, 20-24, 39 and 40.

[Include a very general description of methods and methodological tiers applied, and tools used to calculate GHGs, use of biomass for energy (note that CO2 emissions from biomass are not included in the national total, but reported as a memo item), precursor gases, and, if appropriate, other substances that have an impact on climate (for example, carbon black)]

[If a country is unable to adopt a higher tier method for a specific key category due to lack of resources, the country can use a tier 1 approach. In such cases, the country should clearly document why the methodological choice was not in line with the corresponding decision tree of the *2006 IPCC Guidelines*]

[Include a very general description of the activity data sources for the sector]

[Include a very general description of the emission factor sources. For country-specific emission factors, indicate where they were obtained and which of the subsequent sections provides more information]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of the sector. If appropriate, include more detailed information on the methodological issues of the sector in Annex V.I. In the case of other substances that have an impact on climate (for example, carbon black), include details on its methodological issues in Annex V.VI]

* 1. **Fuel combustion (CRT 1.A)**
     1. **Description and trend of GHGs in the category**

MPG: provisions 47, 48, 53, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

[Include a theoretical description of the category and its subcategories or GHG sources pursuant to the *2006 IPCC Guidelines* only if deemed relevant. In addition, include a practical description of the category in the country, indicating what subcategories or GHG sources are present, their relevance at the national level and a completeness summary]

[Include a description of the category's GHGs, in kt CO2 eq, and an explanation on: (1) percentage contribution of the category to the sector's total emissions in the latest inventory year and its percentage change over time; (2) emissions of the latest inventory year, and their key drivers; (3) percentage contribution of each subcategory in the latest inventory year; (4) variation between the base year and the latest inventory year, and its key drivers; (5) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (6) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total GHG emissions of the category by subcategory (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 3-6.**

[Category]: total GHG emissions by subcategory (kt CO2 eq)

| ***Subcategory*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of total GHG emissions of the category by subcategory (in kt CO2 eq), 1990-2022]

**Figure 3-5.**

[Category]: total GHG emissions by subcategory (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to this category or its subcategories or GHG sources]

* + 1. **Methodological issues of the category**

MPG: provisions 17, 20-24, 39 and 40.

[Include a specific description of the methods and methodological tiers applied in the category, describe or specify equations applied and their direct reference to the *2006 IPCC Guidelines* or other guidelines used by the country. In addition, it would be appropriate to specify the tools used for the calculation of GHGs. This information may be a repetition of the general methodological issues of the sector. If this is the case, quote the relevant section]

[If a country is unable to adopt a higher tier method for a specific key category due to lack of resources, the country can use a tier 1 approach. In such cases, the country should clearly document why the methodological choice was not in line with the corresponding decision tree of the *2006 IPCC Guidelines*]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of this category. If appropriate, include more detailed information on the methodological issues of the category in Annex V]

* + - 1. **Activity data of the category**

[Include a specific description of the activity data sources, calorific values of fuels, use of biomass for energy, assumptions used, data splicing techniques, rationale for choice of data, gaps and barriers, handling of restricted data and confidentiality, etc. If activity data sources are different for each subcategory or GHG source, add a paragraph explaining each source individually]

[Include a summary table for activity data of the category by fuel or GHG source for the entire time series. Unlike emission tables, in the activity data table the years should be entered as row headers, and fuels or GHG sources as column headers (see the example below and adapt it as appropriate). Please, take into account that activity data are also included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 3-7.**

[Category]: activity data by fuel or GHG source (activity data unit)

| ***Year*** | ***Fuel 1*** | ***Fuel 2*** | ***Fuel 3*** | ***Fuel 4*** | ***Fuel 5*** | ***Fuel N...*** |
| --- | --- | --- | --- | --- | --- | --- |
| 1990 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1991 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1992 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1993 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1994 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1995 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1996 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1997 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1998 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1999 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2000 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2001 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2002 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2003 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2004 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2005 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2006 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2007 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2008 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2009 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2010 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2011 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2012 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2013 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2014 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2015 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2016 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2017 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2018 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2019 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2020 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2021 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2022 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the activity data]

* + - 1. **Emission factors applied in the category**

[Include a specific description of the emission factor sources (if taken from the *2006 IPCC Guidelines*, clearly indicate the table where they appear), assumptions used, rationale for choice of data, gaps and barriers, etc. In the case of country-specific emission factors, also indicate where they were obtained, the method used for obtaining them (literature, research, specific models, expert opinion, etc.), and the consistency with default emission factors of the *2006 IPCC Guidelines*]

[Include a summary table for emission factors used by GHG source, especially country-specific emission factors (see the example below and adapt it as appropriate). Please, take into account that emission factors could also be included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 3-8.**

[Category]: emission factors applied by GHG source

| ***GHG source*** | ***GHG*** | ***Value*** | ***Unit*** |
| --- | --- | --- | --- |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the emission factors]

* + 1. **Comparison of the sectoral approach with the reference approach**

MPG: provision 36.

* + - 1. **Description and trend of CO2 from the approach comparison**

MPG: provisions 36, 47, 48, 53, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

[Include in this section a comparison between the national estimates of CO2 emissions from fuel combustion and those obtained using the reference approach, as contained in the IPCC guidelines, and report the results of this comparison]

[As deemed appropriate by the country, include a theoretical description of the comparison between the reference approach and the sectoral approach pursuant to the *2006 IPCC Guidelines.* In addition, include a practical description of the comparison applied to fuel burning activities in the country]

[Include a description of the CO2 emissions obtained using the reference approach, in kt CO2, and an explanation on: (1) emissions of the latest inventory year, and their key drivers; (2) variation between the base year and the latest inventory year, and its key drivers; (3) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (4) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers. Include a general description if significant differences (over 5%) are observed in the CO2 emissions obtained using the sectoral approach, and their key drivers, and the specific years where significant differences occur, and their key drivers for each year]

[Include a summary table for CO2 emissions obtained using the sectoral approach and the reference approach (in kt CO2). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see the example below and adapt it as appropriate)]

**Table 3-9.**

Approach comparison: CO2 emissions obtained using the sectoral approach and reference approach (kt CO2)

| ***Method*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sectoral | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Reference | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Difference** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |
| **Difference %** | **1.1%** | **1.1%** | **1.1%** | **1.1%** | **1.1%** | **1.1%** | **1.1%** | **1.1%** | **1.1%** |

Note:

Source:

[Include a summary figure of the CO2 emissions obtained using the sectoral approach and the reference approach (in kt CO2), 1990-2022]

**Figure 3-6.**

Approach comparison: CO2 emissions obtained using the sectoral approach and reference approach (kt CO2) and percentage difference, 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the comparison between the emissions obtained using the sectoral approach and the reference approach]

* + - 1. **Methodological issues of the reference approach**

MPG: provisions 17, 20-24, 39 and 40.

[Include a general description of the methodology applied in the reference approach, describe or specify equations applied and their direct reference to the *2006 IPCC Guidelines* or other guidelines used by the country. In addition, it would be appropriate to specify the tools used for the calculation of CO2. If appropriate, include more detailed information on the methodological issues of the category in Annex III]

[Include a specific description of the activity data sources, assumptions used, data splicing techniques, rationale for choice of data, gaps and barriers, differences in energy consumption, handling of restricted data and confidentiality, etc.]

[Include a summary table for activity data of the category for apparent consumption (for example, production, import, export, fuel stock changes, international bunkers, etc.) by fuel type for the entire time series. Unlike emission tables, in the activity data table the years should be entered as row headers, and fuels or GHG sources as column headers (see the example below and adapt it as appropriate). Please, take into account that activity data are also included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 3-10.**

Approach comparison: apparent consumption by fuel type (activity data unit)

| ***Year*** | ***Fuel Type 1*** | ***Fuel Type 2*** | ***Fuel Type 3*** | ***Fuel Type 4*** | ***Fuel Type 5*** | ***Fuel Type N...*** |
| --- | --- | --- | --- | --- | --- | --- |
| 1990 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1991 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1992 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1993 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1994 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1995 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1996 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1997 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1998 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1999 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2000 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2001 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2002 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2003 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2004 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2005 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2006 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2007 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2008 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2009 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2010 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2011 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2012 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2013 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2014 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2015 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2016 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2017 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2018 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2019 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2020 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2021 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2022 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the activity data]

[Include a specific description of the emission factor sources (if taken from the *2006 IPCC Guidelines*, clearly indicate the table where they appear), assumptions used, rationale for choice of data, gaps and barriers, etc. In the case of country-specific emission factors, also indicate where they were obtained, the method used for obtaining them (literature, research, specific models, expert opinion, etc.), and the consistency with default emission factors of the *2006 IPCC Guidelines*]

[Include a summary table for emission factors used by GHG source, especially country-specific emission factors (see the example below and adapt it as appropriate). Please, take into account that emission factors could also be included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 3-11.**

Approach comparison: CO2 emission factor applied

| ***GHG source or fuel*** | ***GHG*** | ***Value*** | ***Unit*** |
| --- | --- | --- | --- |
|  | CO2 | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the emission factors]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the emission factors]

* + 1. **International bunkers**

MPG: provision 53.

* + - 1. **Description and trend of GHGs from international bunkers**

MPG: provisions 47, 48, 53, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

[As deemed appropriate by the country, include a theoretical description of international aviation and marine bunker fuel emissions pursuant to the *2006 IPCC Guidelines*. In addition, include a practical description of the circumstances of international bunkers in the country, indicating what GHG sources are present, and a completeness summary]

[Include a description of international aviation and marine bunker fuel emissions, in kt CO2 eq, and an explanation on: (1) emissions of the latest inventory year, and their key drivers; (2) variation between the base year and the latest inventory year, and its key drivers; (3) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (4) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total international aviation and marine bunker fuel emissions (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 3-12.**

International bunkers: aviation and marine bunker fuel GHG emissions (kt CO2 eq)

| ***International transport*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Aviation | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Marine | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of total international aviation and marine bunker fuel emissions (in kt CO2 eq), 1990-2022]

**Figure 3-7.**

International bunkers: aviation and marine bunker fuel GHG emissions (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to international bunkers or its GHG sources]

* + - 1. **Methodological issues of international bunkers**

MPG: provisions 17, 20-24, 39 and 40.

[Include a specific description of the methods and methodological tiers applied to international aviation and marine bunker fuels, describe or specify equations applied and their direct reference to the *2006 IPCC Guidelines* or other guidelines used by the country. In addition, it would be appropriate to specify the tools used for the calculation of GHGs. This information may be a repetition of the general methodological issues of the category. If this is the case, quote the relevant section]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of international aviation and marine bunker fuels. If appropriate, include more detailed information on the methodological issues in Annex V.I]

[Include a specific description of the activity data sources, assumptions used, data splicing techniques, rationale for choice of data, gaps and barriers, handling of restricted data and confidentiality, etc. If activity data sources are different for each GHG source, add a paragraph explaining each source individually]

[Include a summary table for activity data of the category by fuel or GHG source for the entire time series. Unlike emission tables, in the activity data table the years should be entered as row headers, and fuels or GHG sources as column headers (see the example below and adapt it as appropriate). Please, take into account that activity data are also included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 3-13.**

International bunkers: activity data by fuel or GHG source (activity data unit)

| ***Year*** | ***Fuel 1*** | ***Fuel 2*** | ***Fuel 3*** | ***Fuel 4*** | ***Fuel 5*** | ***Fuel N...*** |
| --- | --- | --- | --- | --- | --- | --- |
| 1990 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1991 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1992 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1993 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1994 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1995 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1996 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1997 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1998 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1999 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2000 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2001 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2002 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2003 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2004 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2005 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2006 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2007 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2008 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2009 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2010 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2011 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2012 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2013 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2014 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2015 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2016 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2017 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2018 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2019 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2020 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2021 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2022 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the activity data]

[Include a specific description of the emission factor sources (if taken from the *2006 IPCC Guidelines*, clearly indicate the table where they appear), assumptions used, rationale for choice of data, gaps and barriers, etc. In the case of country-specific emission factors, also indicate where they were obtained, the method used for obtaining them (literature, research, specific models, expert opinion, etc.), and the consistency with default emission factors of the *2006 IPCC Guidelines*]

[Include a summary table for emission factors used by GHG source, especially country-specific emission factors (see the example below and adapt it as appropriate). Please, take into account that emission factors could also be included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 3-14.**

International bunkers: emission factors applied by GHG source

| ***GHG source*** | ***GHG*** | ***Value*** | ***Unit*** |
| --- | --- | --- | --- |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the emission factors]

* + 1. **Feedstocks and no-energy use of fuels**

MPG: provision 54.

[As deemed appropriate by the country, include a theoretical description of feedstocks and the no-energy use of fuels pursuant to the *2006 IPCC Guidelines.* The country should include a practical and clear description of how feedstocks and non-energy use of fuels have been accounted for in the inventory, and how these GHG sources were addressed, indicating if the country has considered their emissions and where they have been included or accounted for (sector, category, subcategory, etc.)]

[Pursuant to the *2006 IPCC Guidelines*, for a number of applications, mainly in larger industrial processes, fossil hydrocarbons are not only used as energy sources, but also have other uses, such as feedstock, lubricants, solvents, etc. The tier approaches are therefore based on fuel combustion statistics. Hence, the use of fuel combustion statistics rather than fuel delivery statistics is key to avoid double counting in emission estimates. When activity data are not quantities of fuel combusted but are instead deliveries to enterprises or main subcategories, there is a risk of double counting emissions from the IPPU or Waste sectors. In some types of non-energy use of fossil hydrocarbons, emissions of fossil-carbon containing substances might occur. Such emissions should be reported under the IPPU sector when they occur]

[Include a specific description of the activity data sources, assumptions used, data splicing techniques, rationale for choice of data, gaps and barriers, handling of restricted data and confidentiality, etc. If activity data sources are different for each GHG source, add a paragraph explaining each source individually]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of feedstocks and non-energy use of fuels. If appropriate, include more detailed information in Annex V.I]

* + 1. **Energy industries (CRT 1.A.1)**
       1. **Description and trend of GHGs in the subcategory**

MPG: provisions 47, 48, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

[Include a theoretical description of the subcategory and its GHG sources pursuant to the *2006 IPCC Guidelines* only if deemed relevant. In addition, include a practical description of the subcategory in the country, indicating what GHG sources are present, their relevance at the national level and a completeness summary]

[Include a description of the subcategory's GHGs, in kt CO2 eq, and an explanation on: (1) percentage contribution of the subcategory to the sector's total emissions in the latest inventory year and its percentage change over time; (2) emissions of the latest inventory year, and their key drivers; (3) percentage contribution of each GHG source in the latest inventory year; (4) variation between the base year and the latest inventory year, and its key drivers; (5) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (6) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total GHG emissions of the subcategory by GHG source (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 3-15.**

[Subcategory]: total GHG emissions by GHG source (kt CO2 eq)

| ***Source*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of total GHG emissions of the subcategory by GHG source (in kt CO2 eq), 1990-2022]

**Figure 3-8.**

[Subcategory]: total GHG emissions by source (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the subcategory or its GHG sources]

* + - 1. **Methodological issues of the subcategory**

MPG: provisions 17, 20-24, 39 and 40.

[Include a specific description of the methods and methodological tiers applied in the subcategory, describe or specify equations applied and their direct reference to the *2006 IPCC Guidelines* or other guidelines used by the country. In addition, it would be appropriate to specify the tools used for the calculation of GHGs. This information may be a repetition of the general methodological issues of the category. If this is the case, quote the relevant section]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of this subcategory. If appropriate, include more detailed information on the methodological issues of the subcategory in Annex V.I]

* + - * 1. **Activity data of the subcategory**

[Include a specific description of the activity data sources, calorific values of fuels, use of biomass for energy, assumptions used, data splicing techniques, rationale for choice of data, gaps and barriers, handling of restricted data and confidentiality, etc. If activity data sources are different for each GHG source, add a paragraph explaining each source individually]

[Include a summary table for activity data of the subcategory by fuel or GHG source for the entire time series. Unlike emission tables, in the activity data table the years should be entered as row headers, and fuels or GHG sources as column headers (see the example below and adapt it as appropriate). Please, take into account that activity data are also included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 3-16.**

[Subcategory]: activity data by fuel or GHG source (activity data unit)

| ***Year*** | ***Fuel 1*** | ***Fuel 2*** | ***Fuel 3*** | ***Fuel 4*** | ***Fuel 5*** | ***Fuel N...*** |
| --- | --- | --- | --- | --- | --- | --- |
| 1990 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1991 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1992 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1993 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1994 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1995 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1996 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1997 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1998 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1999 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2000 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2001 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2002 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2003 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2004 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2005 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2006 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2007 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2008 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2009 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2010 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2011 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2012 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2013 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2014 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2015 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2016 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2017 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2018 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2019 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2020 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2021 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2022 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the activity data]

* + - * 1. **Emission factors applied in the subcategory**

[Include a specific description of the emission factor sources (if taken from the *2006 IPCC Guidelines*, clearly indicate the table where they appear), assumptions used, rationale for choice of data, gaps and barriers, etc. In the case of country-specific emission factors, also indicate where they were obtained, the method used for obtaining them (literature, research, specific models, expert opinion, etc.), and the consistency with default emission factors of the *2006 IPCC Guidelines*]

[Include a summary table for emission factors used by GHG source, especially country-specific emission factors (see the example below and adapt it as appropriate). Please, take into account that emission factors could also be included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 3-17.**

[Subcategory]: emission factors applied by GHG source

| ***GHG source*** | ***GHG*** | ***Value*** | ***Unit*** |
| --- | --- | --- | --- |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the emission factors]

* + - 1. **Description of any flexibility applied to the subcategory**

MPG: provision 4-6.

[Clearly indicate the provisions to which flexibility is applied, concisely clarify capacity constraints, noting that some constraints may be relevant to several provisions, and provide self-determined estimated time frames for improvements in relation to those capacity constraints]

[Include a table on the specific flexibility provisions applied. Please take into account that the illustrative example below is part of the **Flex\_Summary** spreadsheet of the CRT and, thus, the country may also quote it directly in this document]

**Table 3-18.**

[Subcategory]: flexibility provisions applied

| ***MPG flexibility provision*** | ***Gas*** | ***Description of the application of flexibility*** | ***Clarification of capacity constraint*** | ***Time frame for improvement*** | ***Progress made in addressing areas of improvement*** |
| --- | --- | --- | --- | --- | --- |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |

Note:

Source: [], based on the **Flex\_Summary** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the flexibility applied]

* + - 1. **Uncertainty assessment and time-series consistency of the subcategory**

MPG: provisions 26, 27, 29 and 44. Provision 29 offers flexibility to countries that may need it.

[Include a specific description of the quantitative estimate and qualitative discussion of the uncertainty of the subcategory by GHG and GHG source for the starting year and the latest reporting year of the time series, indicate the main uncertainty sources (activity data or emission factors), include any other relevant qualitative description]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to uncertainty. If appropriate, include more detailed information on the uncertainty analysis of the subcategory in Annex II and quote it in this section]

[Include a specific description of how the country ensured time-series consistency for each GHG source of the subcategory, describe gaps and barriers observed, and any data splicing technique applied. It would be appropriate to apply, at a minimum, the time-series consistency activities included in the *2006 IPCC Guidelines* for each subcategory. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the time-series consistency]

* + - 1. **Subcategory-specific QA/QC and verification**

MPG: provisions 34, 35 and 46. Provisions 34 and 35 offer flexibility to countries that may need it.

[Include a specific description of quality assurance and quality control activities applied by the country for each GHG source of the subcategory. It would be appropriate to apply, at a minimum, the QA/QC activities included in the *2006 IPCC Guidelines* for each subcategory. Include any conclusion or relevant aspect that the country may want to highlight pertaining to QA/QC activities. If appropriate, include more detailed information on the subcategory QA/QC activities in Annex IV]

* + - 1. **Subcategory-specific recalculations**

MPG: provisions 28 and 43.

[Include a specific description of the recalculations, indicating the justification for recalculations or any improvement made (in response to peer reviews, methodological changes, improved activity data, etc.), and the implications or effects these recalculations had on the GHG emission trend of the subcategory]

[Include a table on the implications or effects that the recalculations had on the GHG emission trend of the subcategory (see illustrative example below). Please take into account that the table is adapted from the **Table8s1** spreadsheet of the CRT and, thus, the country may quote the CRT directly in this document]

**Table 3-19.**

[Category]: comparison between previous inventory and current inventory (kt CO2 eq)

| ***NGI*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Previous NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Current NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Difference | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Difference % | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% |  |  |
| **Total effect %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |
| **Total effect net %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |

Note:

Source: [], based on the **Table8s1** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the recalculations]

* + - 1. **Subcategory-specific planned improvements**

MPG: provision 7.

[Include a specific description of the activities applied, in the process of being applied, or planned to improve the quality of the subcategory (methods, activity data, emission factors, etc.), including, in particular, monitoring of activities detected by peer review processes or other review processes or previous analyses. It would probably be appropriate to include a table to systematize improvement activities. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the improvement plan]

* + 1. **Manufacturing industries and construction (CRT 1.A.2)**
       1. **Description and trend of GHGs in the subcategory**

MPG: provisions 47, 48, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

[Include a theoretical description of the subcategory and its GHG sources pursuant to the *2006 IPCC Guidelines* only if deemed relevant. In addition, include a practical description of the subcategory in the country, indicating what GHG sources are present, their relevance at the national level and a completeness summary]

[Include a description of the subcategory's GHGs, in kt CO2 eq, and an explanation on: (1) percentage contribution of the subcategory to the sector's total emissions in the latest inventory year and its percentage change over time; (2) emissions of the latest inventory year, and their key drivers; (3) percentage contribution of each GHG source in the latest inventory year; (4) variation between the base year and the latest inventory year, and its key drivers; (5) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (6) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total GHG emissions of the subcategory by GHG source (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 3-20.**

[Subcategory]: total GHG emissions by source (kt CO2 eq)

| ***Source*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of total GHG emissions of the subcategory by GHG source (in kt CO2 eq), 1990-2022]

**Figure 3-9.**

[Subcategory]: total GHG emissions by source (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the subcategory or its GHG sources]

* + - 1. **Methodological issues of the subcategory**

MPG: provisions 17, 20-24, 39 and 40.

[Include a specific description of the methods and methodological tiers applied in the subcategory, describe or specify equations applied and their direct reference to the *2006 IPCC Guidelines* or other guidelines used by the country. In addition, it would be appropriate to specify the tools used for the calculation of GHGs. This information may be a repetition of the general methodological issues of the category. If this is the case, quote the relevant section]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of this subcategory. If appropriate, include more detailed information on the methodological issues of the subcategory in Annex V.I]

* + - * 1. **Activity data of the subcategory**

[Include a specific description of the activity data sources, calorific values of fuels, use of biomass for energy, assumptions used, data splicing techniques, rationale for choice of data, gaps and barriers, handling of restricted data and confidentiality, etc. If activity data sources are different for each GHG source, add a paragraph explaining each source individually]

[Include a summary table for activity data of the subcategory by fuel or GHG source for the entire time series. Unlike emission tables, in the activity data table the years should be entered as row headers, and fuels or GHG sources as column headers (see the example below and adapt it as appropriate). Please, take into account that activity data are also included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 3-21.**

[Subcategory]: activity data by fuel or GHG source (activity data unit)

| ***Year*** | ***Fuel 1*** | ***Fuel 2*** | ***Fuel 3*** | ***Fuel 4*** | ***Fuel 5*** | ***Fuel N...*** |
| --- | --- | --- | --- | --- | --- | --- |
| 1990 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1991 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1992 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1993 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1994 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1995 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1996 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1997 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1998 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1999 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2000 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2001 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2002 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2003 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2004 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2005 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2006 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2007 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2008 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2009 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2010 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2011 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2012 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2013 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2014 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2015 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2016 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2017 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2018 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2019 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2020 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2021 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2022 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the activity data]

* + - * 1. **Emission factors applied in the subcategory**

[Include a specific description of the emission factor sources (if taken from the *2006 IPCC Guidelines*, clearly indicate the table where they appear), assumptions used, rationale for choice of data, gaps and barriers, etc. In the case of country-specific emission factors, also indicate where they were obtained, the method used for obtaining them (literature, research, specific models, expert opinion, etc.), and the consistency with default emission factors of the *2006 IPCC Guidelines*]

[Include a summary table for emission factors used by GHG source, especially country-specific emission factors (see the example below and adapt it as appropriate). Please, take into account that emission factors could also be included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 3-22.**

[Subcategory]: emission factors applied by GHG source

| ***GHG source*** | ***GHG*** | ***Value*** | ***Unit*** |
| --- | --- | --- | --- |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the emission factors]

* + - 1. **Description of any flexibility applied to the subcategory**

MPG: provisions 4-6.

[Clearly indicate the provisions to which flexibility is applied, concisely clarify capacity constraints, noting that some constraints may be relevant to several provisions, and provide self-determined estimated time frames for improvements in relation to those capacity constraints]

[Include a table on the specific flexibility provisions applied. Please take into account that the illustrative example below is part of the **Flex\_Summary** spreadsheet of the CRT and, thus, the country may also quote it directly in this document]

**Table 3-23.**

[Subcategory]: flexibility provisions applied

| ***MPG flexibility provision*** | ***Gas*** | ***Description of the application of flexibility*** | ***Clarification of capacity constraint*** | ***Time frame for improvement*** | ***Progress made in addressing areas of improvement*** |
| --- | --- | --- | --- | --- | --- |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |

Note:

Source: [], based on the **Flex\_Summary** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the flexibility applied]

* + - 1. **Uncertainty assessment and time-series consistency of the subcategory**

MPG: provisions 26, 27, 29 and 44. Provision 29 offers flexibility to countries that may need it.

[Include a specific description of the quantitative estimate and qualitative discussion of the uncertainty of the subcategory by GHG and GHG source for the starting year and the latest reporting year of the time series, indicate the main uncertainty sources (activity data or emission factors), include any other relevant qualitative description]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to uncertainty. If appropriate, include more detailed information on the uncertainty analysis of the subcategory in Annex II and quote it in this section]

[Include a specific description of how the country ensured time-series consistency for each GHG source of the subcategory, describe gaps and barriers observed, and any data splicing technique applied. It would be appropriate to apply, at a minimum, the time-series consistency activities included in the *2006 IPCC Guidelines* for each subcategory. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the time-series consistency]

* + - 1. **Subcategory-specific QA/QC and verification**

MPG: provisions 34, 35 and 46. Provisions 34 and 35 offer flexibility to countries that may need it.

[Include a specific description of quality assurance and quality control activities applied by the country for each GHG source of the subcategory. It would be appropriate to apply, at a minimum, the QA/QC activities included in the *2006 IPCC Guidelines* for each subcategory. Include any conclusion or relevant aspect that the country may want to highlight pertaining to QA/QC activities. If appropriate, include more detailed information on the subcategory QA/QC activities in Annex IV]

* + - 1. **Subcategory-specific recalculations**

MPG: provisions 28 and 43.

[Include a specific description of the recalculations, indicating the justification for recalculations or any improvement made (in response to peer reviews, methodological changes, improved activity data, etc.), and the implications or effects these recalculations had on the GHG emission trend of the subcategory]

[Include a table on the implications or effects that the recalculations had on the GHG emission trend of the subcategory (see illustrative example below). Please take into account that the table is adapted from the **Table8s1** spreadsheet of the CRT and, thus, the country may quote the CRT directly in this document]

**Table 3-24.**

[Category]: comparison between previous inventory and current inventory (kt CO2 eq)

| ***NGI*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Previous NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Current NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Difference | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Difference % | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% |  |  |
| **Total effect %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |
| **Total effect net %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |

Note:

Source: [], based on the **Table8s1** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the recalculations]

* + - 1. **Subcategory-specific planned improvements**

MPG: provision 7.

[Include a specific description of the activities applied, in the process of being applied, or planned to improve the quality of the subcategory (methods, activity data, emission factors, etc.), including, in particular, monitoring of activities detected by peer review processes or other review processes or previous analyses. It would probably be appropriate to include a table to systematize improvement activities. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the improvement plan]

* + 1. **Transport (CRT 1.A.3)**
       1. **Description and trend of GHGs in the subcategory**

MPG: provisions 47, 48, 53, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

[Include a theoretical description of the subcategory and its GHG sources pursuant to the *2006 IPCC Guidelines* only if deemed relevant. In addition, include a practical description of the subcategory in the country, indicating what GHG sources are present, their relevance at the national level and a completeness summary]

[Include a description of the subcategory's GHGs, in kt CO2 eq, and an explanation on: (1) percentage contribution of the subcategory to the sector's total emissions in the latest inventory year and its percentage change over time; (2) emissions of the latest inventory year, and their key drivers; (3) percentage contribution of each GHG source in the latest inventory year; (4) variation between the base year and the latest inventory year, and its key drivers; (5) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (6) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total GHG emissions of the subcategory by GHG source (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 3-25.**

[Subcategory]: total GHG emissions by source (kt CO2 eq)

| ***Source*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of total GHG emissions of the subcategory by GHG source (in kt CO2 eq), 1990-2022]

**Figure 3-10.**

[Subcategory]: total GHG emissions by source (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the subcategory or its GHG sources]

* + - 1. **Methodological issues of the subcategory**

MPG: provisions 17, 20-24, 39 and 40.

[Include a specific description of the methods and methodological tiers applied in the subcategory, describe or specify equations applied and their direct reference to the *2006 IPCC Guidelines* or other guidelines used by the country. In addition, it would be appropriate to specify the tools used for the calculation of GHGs. This information may be a repetition of the general methodological issues of the category. If this is the case, quote the relevant section]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of this subcategory. If appropriate, include more detailed information on the methodological issues of the subcategory in Annex V.I]

* + - * 1. **Activity data of the subcategory**

[Include a specific description of the activity data sources, calorific values of fuels, use of biomass for energy, assumptions used, data splicing techniques, rationale for choice of data, gaps and barriers, handling of restricted data and confidentiality, etc. If activity data sources are different for each GHG source, add a paragraph explaining each source individually]

[Include a summary table for activity data of the subcategory by fuel or GHG source for the entire time series. Unlike emission tables, in the activity data table the years should be entered as row headers, and fuels or GHG sources as column headers (see the example below and adapt it as appropriate). Please, take into account that activity data are also included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 3-26.**

[Subcategory]: activity data by fuel or GHG source (activity data unit)

| ***Year*** | ***Fuel 1*** | ***Fuel 2*** | ***Fuel 3*** | ***Fuel 4*** | ***Fuel 5*** | ***Fuel N...*** |
| --- | --- | --- | --- | --- | --- | --- |
| 1990 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1991 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1992 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1993 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1994 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1995 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1996 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1997 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1998 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1999 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2000 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2001 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2002 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2003 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2004 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2005 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2006 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2007 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2008 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2009 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2010 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2011 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2012 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2013 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2014 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2015 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2016 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2017 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2018 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2019 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2020 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2021 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2022 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the activity data]

* + - * 1. **Emission factors applied in the subcategory**

[Include a specific description of the emission factor sources (if taken from the *2006 IPCC Guidelines*, clearly indicate the table where they appear), assumptions used, rationale for choice of data, gaps and barriers, etc. In the case of country-specific emission factors, also indicate where they were obtained, the method used for obtaining them (literature, research, specific models, expert opinion, etc.), and the consistency with default emission factors of the *2006 IPCC Guidelines*]

[Include a summary table for emission factors used by GHG source, especially country-specific emission factors (see the example below and adapt it as appropriate). Please, take into account that emission factors could also be included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 3-27.**

[Subcategory]: emission factors applied by GHG source

| ***GHG source*** | ***GHG*** | ***Value*** | ***Unit*** |
| --- | --- | --- | --- |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the emission factors]

* + - 1. **Description of any flexibility applied to the subcategory**

MPG: provisions 4-6.

[Clearly indicate the provisions to which flexibility is applied, concisely clarify capacity constraints, noting that some constraints may be relevant to several provisions, and provide self-determined estimated time frames for improvements in relation to those capacity constraints]

[Include a table on the specific flexibility provisions applied. Please take into account that the illustrative example below is part of the **Flex\_Summary** spreadsheet of the CRT and, thus, the country may also quote it directly in this document]

**Table 3-28.**

[Subcategory]: flexibility provisions applied

| ***MPG flexibility provision*** | ***Gas*** | ***Description of the application of flexibility*** | ***Clarification of capacity constraint*** | ***Time frame for improvement*** | ***Progress made in addressing areas of improvement*** |
| --- | --- | --- | --- | --- | --- |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |

Note:

Source: [], based on the **Flex\_Summary** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the flexibility applied]

* + - 1. **Uncertainty assessment and time-series consistency of the subcategory**

MPG: provisions 26, 27, 29 and 44. Provision 29 offers flexibility to countries that may need it.

[Include a specific description of the quantitative estimate and qualitative discussion of the uncertainty of the subcategory by GHG and GHG source for the starting year and the latest reporting year of the time series, indicate the main uncertainty sources (activity data or emission factors), include any other relevant qualitative description]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to uncertainty. If appropriate, include more detailed information on the uncertainty analysis of the subcategory in Annex II and quote it in this section]

[Include a specific description of how the country ensured time-series consistency for each GHG source of the subcategory, describe gaps and barriers observed, and any data splicing technique applied. It would be appropriate to apply, at a minimum, the time-series consistency activities included in the *2006 IPCC Guidelines* for each subcategory. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the time-series consistency]

* + - 1. **Subcategory-specific QA/QC and verification**

MPG: provisions 34, 35 and 46. Provisions 34 and 35 offer flexibility to countries that may need it.

[Include a specific description of quality assurance and quality control activities applied by the country for each GHG source of the subcategory. It would be appropriate to apply, at a minimum, the QA/QC activities included in the *2006 IPCC Guidelines* for each subcategory. Include any conclusion or relevant aspect that the country may want to highlight pertaining to QA/QC activities. If appropriate, include more detailed information on the subcategory QA/QC activities in Annex IV]

* + - 1. **Subcategory-specific recalculations**

MPG: provisions 28 and 43.

[Include a specific description of the recalculations, indicating the justification for recalculations or any improvement made (in response to peer reviews, methodological changes, improved activity data, etc.), and the implications or effects these recalculations had on the GHG emission trend of the subcategory]

[Include a table on the implications or effects that the recalculations had on the GHG emission trend of the subcategory (see illustrative example below). Please take into account that the table is adapted from the **Table8s1** spreadsheet of the CRT and, thus, the country may quote the CRT directly in this document]

**Table 3-29.**

[Category]: comparison between previous inventory and current inventory (kt CO2 eq)

| ***NGI*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Previous NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Current NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Difference | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Difference % | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% |  |  |
| **Total effect %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |
| **Total effect net %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |

Note:

Source: [], based on the **Table8s1** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the recalculations]

* + - 1. **Subcategory-specific planned improvements**

MPG: provision 7.

[Include a specific description of the activities applied, in the process of being applied, or planned to improve the quality of the subcategory (methods, activity data, emission factors, etc.), including, in particular, monitoring of activities detected by peer review processes or other review processes or previous analyses. It would probably be appropriate to include a table to systematize improvement activities. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the improvement plan]

* + 1. **Other sectors (CRT 1.A.4)**
       1. **Description and trend of GHGs in the subcategory**

MPG: provisions 47, 48, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

[Include a theoretical description of the subcategory and its GHG sources pursuant to the *2006 IPCC Guidelines* only if deemed relevant. In addition, include a practical description of the subcategory in the country, indicating what GHG sources are present, their relevance at the national level and a completeness summary]

[Include a description of the subcategory's GHGs, in kt CO2 eq, and an explanation on: (1) percentage contribution of the subcategory to the sector's total emissions in the latest inventory year and its percentage change over time; (2) emissions of the latest inventory year, and their key drivers; (3) percentage contribution of each GHG source in the latest inventory year; (4) variation between the base year and the latest inventory year, and its key drivers; (5) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (6) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total GHG emissions of the subcategory by GHG source (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 3-30.**

[Subcategory]: total GHG emissions by source (kt CO2 eq)

| ***Source*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of total GHG emissions of the subcategory by GHG source (in kt CO2 eq), 1990-2022]

**Figure 3-11.**

[Subcategory]: total GHG emissions by source (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the subcategory or its GHG sources]

* + - 1. **Methodological issues of the subcategory**

MPG: provisions 17, 20-24, 39 and 40.

[Include a specific description of the methods and methodological tiers applied in the subcategory, describe or specify equations applied and their direct reference to the *2006 IPCC Guidelines* or other guidelines used by the country. In addition, it would be appropriate to specify the tools used for the calculation of GHGs. This information may be a repetition of the general methodological issues of the category. If this is the case, quote the relevant section]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of this subcategory. If appropriate, include more detailed information on the methodological issues of the subcategory in Annex V.I]

* + - * 1. **Activity data of the subcategory**

[Include a specific description of the activity data sources, calorific values of fuels, use of biomass for energy, assumptions used, data splicing techniques, rationale for choice of data, gaps and barriers, handling of restricted data and confidentiality, etc. If activity data sources are different for each GHG source, add a paragraph explaining each source individually]

[Include a summary table for activity data of the subcategory by fuel or GHG source for the entire time series. Unlike emission tables, in the activity data table the years should be entered as row headers, and fuels or GHG sources as column headers (see the example below and adapt it as appropriate). Please, take into account that activity data are also included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 3-31.**

[Subcategory]: activity data by fuel or GHG source (activity data unit)

| ***Year*** | ***Fuel 1*** | ***Fuel 2*** | ***Fuel 3*** | ***Fuel 4*** | ***Fuel 5*** | ***Fuel N...*** |
| --- | --- | --- | --- | --- | --- | --- |
| 1990 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1991 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1992 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1993 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1994 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1995 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1996 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1997 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1998 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1999 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2000 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2001 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2002 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2003 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2004 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2005 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2006 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2007 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2008 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2009 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2010 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2011 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2012 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2013 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2014 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2015 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2016 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2017 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2018 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2019 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2020 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2021 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2022 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the activity data]

* + - * 1. **Emission factors applied in the subcategory**

[Include a specific description of the emission factor sources (if taken from the *2006 IPCC Guidelines*, clearly indicate the table where they appear), assumptions used, rationale for choice of data, gaps and barriers, etc. In the case of country-specific emission factors, also indicate where they were obtained, the method used for obtaining them (literature, research, specific models, expert opinion, etc.), and the consistency with default emission factors of the *2006 IPCC Guidelines*]

[Include a summary table for emission factors used by GHG source, especially country-specific emission factors (see the example below and adapt it as appropriate). Please, take into account that emission factors could also be included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 3-32.**

[Subcategory]: emission factors applied by GHG source

| ***GHG source*** | ***GHG*** | ***Value*** | ***Unit*** |
| --- | --- | --- | --- |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the emission factors]

* + - 1. **Description of any flexibility applied to the subcategory**

MPG: provisions 4-6.

[Clearly indicate the provisions to which flexibility is applied, concisely clarify capacity constraints, noting that some constraints may be relevant to several provisions, and provide self-determined estimated time frames for improvements in relation to those capacity constraints]

[Include a table on the specific flexibility provisions applied. Please take into account that the illustrative example below is part of the **Flex\_Summary** spreadsheet of the CRT and, thus, the country may also quote it directly in this document]

**Table 3-33.**

[Subcategory]: flexibility provisions applied

| ***MPG flexibility provision*** | ***Gas*** | ***Description of the application of flexibility*** | ***Clarification of capacity constraint*** | ***Time frame for improvement*** | ***Progress made in addressing areas of improvement*** |
| --- | --- | --- | --- | --- | --- |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |

Note:

Source: [], based on the **Flex\_Summary** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the flexibility applied]

* + - 1. **Uncertainty assessment and time-series consistency of the subcategory**

MPG: provisions 26, 27, 29 and 44. Provision 29 offers flexibility to countries that may need it.

[Include a specific description of the quantitative estimate and qualitative discussion of the uncertainty of the subcategory by GHG and GHG source for the starting year and the latest reporting year of the time series, indicate the main uncertainty sources (activity data or emission factors), include any other relevant qualitative description]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to uncertainty. If appropriate, include more detailed information on the uncertainty analysis of the subcategory in Annex II and quote it in this section]

[Include a specific description of how the country ensured time-series consistency for each GHG source of the subcategory, describe gaps and barriers observed, and any data splicing technique applied. It would be appropriate to apply, at a minimum, the time-series consistency activities included in the *2006 IPCC Guidelines* for each subcategory. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the time-series consistency]

* + - 1. **Subcategory-specific QA/QC and verification**

MPG: provisions 34, 35 and 46. Provisions 34 and 35 offer flexibility to countries that may need it.

[Include a specific description of quality assurance and quality control activities applied by the country for each GHG source of the subcategory. It would be appropriate to apply, at a minimum, the QA/QC activities included in the *2006 IPCC Guidelines* for each subcategory. Include any conclusion or relevant aspect that the country may want to highlight pertaining to QA/QC activities. If appropriate, include more detailed information on the subcategory QA/QC activities in Annex IV]

* + - 1. **Subcategory-specific recalculations**

MPG: provisions 28 and 43.

[Include a specific description of the recalculations, indicating the justification for recalculations or any improvement made (in response to peer reviews, methodological changes, improved activity data, etc.), and the implications or effects these recalculations had on the GHG emission trend of the subcategory]

[Include a table on the implications or effects that the recalculations had on the GHG emission trend of the subcategory (see illustrative example below). Please take into account that the table is adapted from the **Table8s1** spreadsheet of the CRT and, thus, the country may quote the CRT directly in this document]

**Table 3-34.**

[Category]: comparison between previous inventory and current inventory (kt CO2 eq)

| ***NGI*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Previous NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Current NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Difference | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Difference % | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% |  |  |
| **Total effect %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |
| **Total effect net %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |

Note:

Source: [], based on the **Table8s1** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the recalculations]

* + - 1. **Subcategory-specific planned improvements**

MPG: provision 7.

[Include a specific description of the activities applied, in the process of being applied, or planned to improve the quality of the subcategory (methods, activity data, emission factors, etc.), including, in particular, monitoring of activities detected by peer review processes or other review processes or previous analyses. It would probably be appropriate to include a table to systematize improvement activities. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the improvement plan]

* + 1. **Other (not specified elsewhere) (CRT 1.A.5)**

[Only if applicable]

* 1. **Fugitive emissions from fuels (CRT 1.B)**
     1. **Description and trend of GHGs in the category**

MPG: provisions 47, 48, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

[Include a theoretical description of the category and its subcategories or GHG sources pursuant to the *2006 IPCC Guidelines* only if deemed relevant. In addition, include a practical description of the category in the country, indicating what subcategories or GHG sources are present, their relevance at the national level and a completeness summary]

[Include a description of the category's GHGs, in kt CO2 eq, and an explanation on: (1) percentage contribution of the category to the sector's total emissions in the latest inventory year and its percentage change over time; (2) emissions of the latest inventory year, and their key drivers; (3) percentage contribution of each subcategory in the latest inventory year; (4) variation between the base year and the latest inventory year, and its key drivers; (5) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (6) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total GHG emissions of the category by subcategory (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 3-35.**

[Category]: total GHG emissions by subcategory (kt CO2 eq)

| ***Subcategory*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of total GHG emissions of the category by subcategory (in kt CO2 eq), 1990-2022]

**Figure 3-12.**

[Category]: total GHG emissions by subcategory (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to this category or its subcategories or GHG sources]

* + 1. **Methodological issues of the category**

MPG: provisions 17, 20-24, 39 and 40.

[Include a specific description of the methods and methodological tiers applied in the category, describe or specify equations applied and their direct reference to the *2006 IPCC Guidelines* or other guidelines used by the country. In addition, it would be appropriate to specify the tools used for the calculation of GHGs. This information may be a repetition of the general methodological issues of the sector. If this is the case, quote the relevant section]

[If a country is unable to adopt a higher tier method for a specific key category due to lack of resources, the country can use a tier 1 approach. In such cases, the country should clearly document why the methodological choice was not in line with the corresponding decision tree of the *2006 IPCC Guidelines*]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of this category. If appropriate, include more detailed information on the methodological issues of the category in Annex V]

* + - 1. **Activity data of the category**

[Include a specific description of the activity data sources, assumptions used, data splicing techniques, rationale for choice of data, gaps and barriers, handling of restricted data and confidentiality, etc. If activity data sources are different for each subcategory or GHG source, add a paragraph explaining each source individually]

[Include a summary table for activity data of the category by GHG source for the entire time series. Unlike emission tables, in the activity data table the years should be entered as row headers, and GHG sources as column headers (see the example below and adapt it as appropriate). Please, take into account that activity data are also included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 3-36.**

[Category]: activity data by GHG source (activity data unit)

| ***Year*** | ***GHG source 1*** | ***GHG source 2*** | ***GHG source 3*** | ***GHG source 4*** | ***GHG source 5*** | ***GHG source N*** |
| --- | --- | --- | --- | --- | --- | --- |
| 1990 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1991 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1992 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1993 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1994 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1995 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1996 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1997 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1998 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1999 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2000 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2001 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2002 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2003 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2004 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2005 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2006 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2007 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2008 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2009 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2010 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2011 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2012 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2013 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2014 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2015 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2016 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2017 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2018 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2019 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2020 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2021 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2022 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the activity data]

* + - 1. **Emission factors applied in the category**

[Include a specific description of the emission factor sources (if taken from the *2006 IPCC Guidelines*, clearly indicate the table where they appear), assumptions used, rationale for choice of data, gaps and barriers, etc. In the case of country-specific emission factors, also indicate where they were obtained, the method used for obtaining them (literature, research, specific models, expert opinion, etc.), and the consistency with default emission factors of the *2006 IPCC Guidelines*]

[Include a summary table for emission factors used by GHG source, especially country-specific emission factors (see the example below and adapt it as appropriate). Please, take into account that emission factors could also be included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 3-37.**

[Category]: emission factors applied by GHG source

| ***GHG source*** | ***GHG*** | ***Value*** | ***Unit*** |
| --- | --- | --- | --- |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the emission factors]

* + 1. **Solid fuels (CRT 1.B.1)**
       1. **Description and trend of GHGs in the subcategory**

MPG: provisions 47, 48, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

[Include a theoretical description of the subcategory and its GHG sources pursuant to the *2006 IPCC Guidelines* only if deemed relevant. In addition, include a practical description of the subcategory in the country, indicating what GHG sources are present, their relevance at the national level and a completeness summary]

[Include a description of the subcategory's GHGs, in kt CO2 eq, and an explanation on: (1) percentage contribution of the subcategory to the sector's total emissions in the latest inventory year and its percentage change over time; (2) emissions of the latest inventory year, and their key drivers; (3) percentage contribution of each GHG source in the latest inventory year; (4) variation between the base year and the latest inventory year, and its key drivers; (5) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (6) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total GHG emissions of the subcategory by GHG source (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 3-38.**

[Subcategory]: total GHG emissions by source (kt CO2 eq)

| ***Source*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of total GHG emissions of the subcategory by GHG source (in kt CO2 eq), 1990-2022]

**Figure 3-13.**

[Subcategory]: total GHG emissions by source (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the subcategory or its GHG sources]

* + - 1. **Methodological issues of the subcategory**

MPG: provisions 17, 20-24, 39 and 40.

[Include a specific description of the methods and methodological tiers applied in the subcategory, describe or specify equations applied and their direct reference to the *2006 IPCC Guidelines* or other guidelines used by the country. In addition, it would be appropriate to specify the tools used for the calculation of GHGs. This information may be a repetition of the general methodological issues of the category. If this is the case, quote the relevant section]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of this subcategory. If appropriate, include more detailed information on the methodological issues of the subcategory in Annex V.I]

* + - * 1. **Activity data of the subcategory**

[Include a specific description of the activity data sources, assumptions used, data splicing techniques, rationale for choice of data, gaps and barriers, handling of restricted data and confidentiality, etc. If activity data sources are different for each GHG source, add a paragraph explaining each source individually]

[Include a summary table for activity data of the category by GHG source for the entire time series. Unlike emission tables, in the activity data table the years should be entered as row headers, and GHG sources as column headers (see the example below and adapt it as appropriate). Please, take into account that activity data are also included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 3-39.**

[Subcategory]: activity data by GHG source (activity data unit)

| ***Year*** | ***GHG source 1*** | ***GHG source 2*** | ***GHG source 3*** | ***GHG source 4*** | ***GHG source 5*** | ***GHG source N*** |
| --- | --- | --- | --- | --- | --- | --- |
| 1990 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1991 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1992 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1993 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1994 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1995 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1996 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1997 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1998 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1999 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2000 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2001 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2002 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2003 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2004 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2005 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2006 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2007 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2008 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2009 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2010 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2011 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2012 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2013 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2014 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2015 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2016 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2017 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2018 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2019 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2020 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2021 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2022 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the activity data]

* + - * 1. **Emission factors applied in the subcategory**

[Include a specific description of the emission factor sources (if taken from the *2006 IPCC Guidelines*, clearly indicate the table where they appear), assumptions used, rationale for choice of data, gaps and barriers, etc. In the case of country-specific emission factors, also indicate where they were obtained, the method used for obtaining them (literature, research, specific models, expert opinion, etc.), and the consistency with default emission factors of the *2006 IPCC Guidelines*]

[Include a summary table for emission factors used by GHG source, especially country-specific emission factors (see the example below and adapt it as appropriate). Please, take into account that emission factors could also be included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 3-40.**

[Subcategory]: emission factors applied by GHG source

| ***GHG source*** | ***GHG*** | ***Value*** | ***Unit*** |
| --- | --- | --- | --- |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the emission factors]

* + - 1. **Description of any flexibility applied to the subcategory**

MPG: provisions 4-6.

[Clearly indicate the provisions to which flexibility is applied, concisely clarify capacity constraints, noting that some constraints may be relevant to several provisions, and provide self-determined estimated time frames for improvements in relation to those capacity constraints]

[Include a table on the specific flexibility provisions applied. Please take into account that the illustrative example below is part of the **Flex\_Summary** spreadsheet of the CRT and, thus, the country may also quote it directly in this document]

**Table 3-41.**

[Subcategory]: flexibility provisions applied

| ***MPG flexibility provision*** | ***Gas*** | ***Description of the application of flexibility*** | ***Clarification of capacity constraint*** | ***Time frame for improvement*** | ***Progress made in addressing areas of improvement*** |
| --- | --- | --- | --- | --- | --- |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |

Note:

Source: [], based on the **Flex\_Summary** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the flexibility applied]

* + - 1. **Uncertainty assessment and time-series consistency of the subcategory**

MPG: provisions 26, 27, 29 and 44. Provision 29 offers flexibility to countries that may need it.

[Include a specific description of the quantitative estimate and qualitative discussion of the uncertainty of the subcategory by GHG and GHG source for the starting year and the latest reporting year of the time series, indicate the main uncertainty sources (activity data or emission factors), include any other relevant qualitative description]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to uncertainty. If appropriate, include more detailed information on the uncertainty analysis of the subcategory in Annex II and quote it in this section]

[Include a specific description of how the country ensured time-series consistency for each GHG source of the subcategory, describe gaps and barriers observed, and any data splicing technique applied. It would be appropriate to apply, at a minimum, the time-series consistency activities included in the *2006 IPCC Guidelines* for each subcategory. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the time-series consistency]

* + - 1. **Subcategory-specific QA/QC and verification**

MPG: provisions 34, 35 and 46. Provisions 34 and 35 offer flexibility to countries that may need it.

[Include a specific description of quality assurance and quality control activities applied by the country for each GHG source of the subcategory. It would be appropriate to apply, at a minimum, the QA/QC activities included in the *2006 IPCC Guidelines* for each subcategory. Include any conclusion or relevant aspect that the country may want to highlight pertaining to QA/QC activities. If appropriate, include more detailed information on the subcategory QA/QC activities in Annex IV]

* + - 1. **Subcategory-specific recalculations**

MPG: provisions 28 and 43.

[Include a specific description of the recalculations, indicating the justification for recalculations or any improvement made (in response to peer reviews, methodological changes, improved activity data, etc.), and the implications or effects these recalculations had on the GHG emission trend of the subcategory]

[Include a table on the implications or effects that the recalculations had on the GHG emission trend of the subcategory (see illustrative example below). Please take into account that the table is adapted from the **Table8s1** spreadsheet of the CRT and, thus, the country may quote the CRT directly in this document]

**Table 3-42.**

[Category]: comparison between previous inventory and current inventory (kt CO2 eq)

| ***NGI*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Previous NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Current NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Difference | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Difference % | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% |  |  |
| **Total effect %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |
| **Total effect net %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |

Note:

Source: [], based on the **Table8s1** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the recalculations]

* + - 1. **Subcategory-specific planned improvements**

MPG: provision 7.

[Include a specific description of the activities applied, in the process of being applied, or planned to improve the quality of the subcategory (methods, activity data, emission factors, etc.), including, in particular, monitoring of activities detected by peer review processes or other review processes or previous analyses. It would probably be appropriate to include a table to systematize improvement activities. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the improvement plan]

* + 1. **Oil and natural gas** **and other emissions from energy production (CRT 1.B.2)**
       1. **Description and trend of GHGs in the subcategory**

MPG: provisions 47, 48, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

[Include a theoretical description of the subcategory and its GHG sources pursuant to the *2006 IPCC Guidelines* only if deemed relevant. In addition, include a practical description of the subcategory in the country, indicating what sources are present, their relevance at the national level and a completeness summary]

[Include a description of the subcategory's GHGs, in kt CO2 eq, and an explanation on: (1) percentage contribution of the subcategory to the sector's total emissions in the latest inventory year and its percentage change over time; (2) emissions of the latest inventory year, and their key drivers; (3) percentage contribution of each GHG source in the latest inventory year; (4) variation between the base year and the latest inventory year, and its key drivers; (5) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (6) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total GHG emissions of the subcategory by GHG source (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 3-43.**

[Subcategory]: total GHG emissions by source (kt CO2 eq)

| ***Source*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of total GHG emissions of the subcategory by GHG source (in kt CO2 eq), 1990-2022]

**Figure 3-14.**

[Subcategory]: total GHG emissions by source (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the subcategory or its GHG sources]

* + - 1. **Methodological issues of the subcategory**

MPG: provisions 17, 20-24, 39 and 40.

[Include a specific description of the methods and methodological tiers applied in the subcategory, describe or specify equations applied and their direct reference to the *2006 IPCC Guidelines* or other guidelines used by the country. In addition, it would be appropriate to specify the tools used for the calculation of GHGs. This information may be a repetition of the general methodological issues of the category. If this is the case, quote the relevant section]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of this subcategory. If appropriate, include more detailed information on the methodological issues of the subcategory in Annex V.I]

* + - * 1. **Activity data of the subcategory**

[Include a specific description of the activity data sources, assumptions used, data splicing techniques, rationale for choice of data, gaps and barriers, handling of restricted data and confidentiality, etc. If activity data sources are different for each GHG source, add a paragraph explaining each source individually]

[Include a summary table for activity data of the category by GHG source for the entire time series. Unlike emission tables, in the activity data table the years should be entered as row headers, and GHG sources as column headers (see the example below and adapt it as appropriate). Please, take into account that activity data are also included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 3-44.**

[Subcategory]: activity data by GHG source (activity data unit)

| ***Year*** | ***GHG source 1*** | ***GHG source 2*** | ***GHG source 3*** | ***GHG source 4*** | ***GHG source 5*** | ***GHG source N*** |
| --- | --- | --- | --- | --- | --- | --- |
| 1990 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1991 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1992 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1993 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1994 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1995 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1996 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1997 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1998 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1999 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2000 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2001 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2002 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2003 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2004 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2005 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2006 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2007 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2008 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2009 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2010 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2011 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2012 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2013 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2014 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2015 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2016 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2017 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2018 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2019 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2020 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2021 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2022 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the activity data]

* + - * 1. **Emission factors applied in the subcategory**

[Include a specific description of the emission factor sources (if taken from the *2006 IPCC Guidelines*, clearly indicate the table where they appear), assumptions used, rationale for choice of data, gaps and barriers, etc. In the case of country-specific emission factors, also indicate where they were obtained, the method used for obtaining them (literature, research, specific models, expert opinion, etc.), and the consistency with default emission factors of the *2006 IPCC Guidelines*]

[Include a summary table for emission factors used by GHG source, especially country-specific emission factors (see the example below and adapt it as appropriate). Please, take into account that emission factors could also be included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 3-45.**

[Subcategory]: emission factors applied by GHG source

| ***GHG source*** | ***GHG*** | ***Value*** | ***Unit*** |
| --- | --- | --- | --- |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the emission factors]

* + - 1. **Description of any flexibility applied to the subcategory**

MPG: provisions 4-6.

[Clearly indicate the provisions to which flexibility is applied, concisely clarify capacity constraints, noting that some constraints may be relevant to several provisions, and provide self-determined estimated time frames for improvements in relation to those capacity constraints]

[Include a table on the specific flexibility provisions applied. Please take into account that the illustrative example below is part of the **Flex\_Summary** spreadsheet of the CRT and, thus, the country may also quote it directly in this document]

**Table 3-46.**

[Subcategory]: flexibility provisions applied

| ***MPG flexibility provision*** | ***Gas*** | ***Description of the application of flexibility*** | ***Clarification of capacity constraint*** | ***Time frame for improvement*** | ***Progress made in addressing areas of improvement*** |
| --- | --- | --- | --- | --- | --- |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |

Note:

Source: [], based on the **Flex\_Summary** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the flexibility applied]

* + - 1. **Uncertainty assessment and time-series consistency of the subcategory**

MPG: provisions 26, 27, 29 and 44. Provision 29 offers flexibility to countries that may need it.

[Include a specific description of the quantitative estimate and qualitative discussion of the uncertainty of the subcategory by GHG and GHG source for the starting year and the latest reporting year of the time series, indicate the main uncertainty sources (activity data or emission factors), include any other relevant qualitative description]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to uncertainty. If appropriate, include more detailed information on the uncertainty analysis of the subcategory in Annex II and quote it in this section]

[Include a specific description of how the country ensured time-series consistency for each GHG source of the subcategory, describe gaps and barriers observed, and any data splicing technique applied. It would be appropriate to apply, at a minimum, the time-series consistency activities included in the *2006 IPCC Guidelines* for each subcategory. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the time-series consistency]

* + - 1. **Subcategory-specific QA/QC and verification**

MPG: provisions 34, 35 and 46. Provisions 34 and 35 offer flexibility to countries that may need it.

[Include a specific description of quality assurance and quality control activities applied by the country for each GHG source of the subcategory. It would be appropriate to apply, at a minimum, the QA/QC activities included in the *2006 IPCC Guidelines* for each subcategory. Include any conclusion or relevant aspect that the country may want to highlight pertaining to QA/QC activities. If appropriate, include more detailed information on the subcategory QA/QC activities in Annex IV]

* + - 1. **Subcategory-specific recalculations**

MPG: provisions 28 and 43.

[Include a specific description of the recalculations, indicating the justification for recalculations or any improvement made (in response to peer reviews, methodological changes, improved activity data, etc.), and the implications or effects these recalculations had on the GHG emission trend of the subcategory]

[Include a table on the implications or effects that the recalculations had on the GHG emission trend of the subcategory (see illustrative example below). Please take into account that the table is adapted from the **Table8s1** spreadsheet of the CRT and, thus, the country may quote the CRT directly in this document]

**Table 3-47.**

[Category]: comparison between previous inventory and current inventory (kt CO2 eq)

| ***NGI*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Previous NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Current NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Difference | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Difference % | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% |  |  |
| **Total effect %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |
| **Total effect net %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |

Note:

Source: [], based on the **Table8s1** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the recalculations]

* + - 1. **Subcategory-specific planned improvements**

MPG: provision 7.

[Include a specific description of the activities applied, in the process of being applied, or planned to improve the quality of the subcategory (methods, activity data, emission factors, etc.), including, in particular, monitoring of activities detected by peer review processes or other review processes or previous analyses. It would probably be appropriate to include a table to systematize improvement activities. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the improvement plan]

* 1. **CO2 transport and storage (CRT 1.C)**
     1. **Description and trend of GHGs in the category**

MPG: provisions 47, 48, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

[Include a theoretical description of the category and its subcategories or GHG sources pursuant to the *2006 IPCC Guidelines* only if deemed relevant. In addition, include a practical description of the category in the country, indicating what subcategories or GHG sources are present, their relevance at the national level and a completeness summary]

[Include a description of the category's GHGs, in kt CO2 eq, and an explanation on: (1) percentage contribution of the category to the sector's total emissions in the latest inventory year and its percentage change over time; (2) emissions of the latest inventory year, and their key drivers; (3) percentage contribution of each subcategory in the latest inventory year; (4) variation between the base year and the latest inventory year, and its key drivers; (5) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (6) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total GHG emissions of the category by subcategory (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 3-48.**

[Category]: total GHG emissions by subcategory (kt CO2 eq)

| ***Subcategory*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of total GHG emissions of the category by subcategory (in kt CO2 eq), 1990-2022]

**Figure 3-15.**

[Category]: total GHG emissions by subcategory (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to this category or its subcategories or GHG sources]

* + 1. **Methodological issues of the category**

MPG: provisions 17, 20-24, 39 and 40.

[Include a specific description of the methods and methodological tiers applied in the category, describe or specify equations applied and their direct reference to the *2006 IPCC Guidelines* or other guidelines used by the country. In addition, it would be appropriate to specify the tools used for the calculation of GHGs. This information may be a repetition of the general methodological issues of the sector. If this is the case, quote the relevant section]

[If a country is unable to adopt a higher tier method for a specific key category due to lack of resources, the country can use a tier 1 approach. In such cases, the country should clearly document why the methodological choice was not in line with the corresponding decision tree of the *2006 IPCC Guidelines*]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of this category. If appropriate, include more detailed information on the methodological issues of the category in Annex V]

* + - 1. **Activity data of the category**

[Include a specific description of the activity data sources, assumptions used, data splicing techniques, rationale for choice of data, gaps and barriers, handling of restricted data and confidentiality, etc. If activity data sources are different for each subcategory or GHG source, add a paragraph explaining each source individually]

[Include a summary table for activity data of the category by GHG source for the entire time series. Unlike emission tables, in the activity data table the years should be entered as row headers, and GHG sources as column headers (see the example below and adapt it as appropriate). Please, take into account that activity data are also included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 3-49.**

[Category]: activity data by GHG source (activity data unit)

| ***Year*** | ***GHG source 1*** | ***GHG source 2*** | ***GHG source 3*** | ***GHG source 4*** | ***GHG source 5*** | ***GHG source N*** |
| --- | --- | --- | --- | --- | --- | --- |
| 1990 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1991 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1992 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1993 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1994 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1995 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1996 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1997 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1998 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1999 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2000 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2001 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2002 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2003 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2004 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2005 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2006 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2007 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2008 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2009 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2010 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2011 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2012 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2013 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2014 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2015 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2016 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2017 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2018 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2019 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2020 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2021 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2022 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the activity data]

* + - 1. **Emission factors applied in the category**

[Include a specific description of the emission factor sources (if taken from the *2006 IPCC Guidelines*, clearly indicate the table where they appear), assumptions used, rationale for choice of data, gaps and barriers, etc. In the case of country-specific emission factors, also indicate where they were obtained, the method used for obtaining them (literature, research, specific models, expert opinion, etc.), and the consistency with default emission factors of the *2006 IPCC Guidelines*]

[Include a summary table for emission factors used by GHG source, especially country-specific emission factors (see the example below and adapt it as appropriate). Please, take into account that emission factors could also be included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 3-50.**

[Category]: emission factors applied by GHG source

| ***GHG source*** | ***GHG*** | ***Value*** | ***Unit*** |
| --- | --- | --- | --- |
|  | CO2 | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the emission factors]

* + 1. **Transport of CO2 (CRT 1.C.1)**
       1. **Description and trend of GHGs in the subcategory**

MPG: provisions 47, 48, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

[Include a theoretical description of the subcategory and its GHG sources pursuant to the *2006 IPCC Guidelines* only if deemed relevant. In addition, include a practical description of the subcategory in the country, indicating what GHG sources are present, their relevance at the national level and a completeness summary]

[Include a description of the subcategory's GHGs, in kt CO2 eq, and an explanation on: (1) percentage contribution of the subcategory to the sector's total emissions in the latest inventory year and its percentage change over time; (2) emissions of the latest inventory year, and their key drivers; (3) percentage contribution of each GHG source in the latest inventory year; (4) variation between the base year and the latest inventory year, and its key drivers; (5) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (6) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total GHG emissions of the subcategory by GHG source (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 3-51.**

[Subcategory]: total GHG emissions by source (kt CO2 eq)

| ***Subcategory*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of total GHG emissions of the subcategory by GHG source (in kt CO2 eq), 1990-2022]

**Figure 3-16.**

[Subcategory]: total GHG emissions by source (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the subcategory or its GHG sources]

* + - 1. **Methodological issues of the subcategory**

MPG: provisions 17, 20-24, 39 and 40.

[Include a specific description of the methods and methodological tiers applied in the subcategory, describe or specify equations applied and their direct reference to the *2006 IPCC Guidelines* or other guidelines used by the country. In addition, it would be appropriate to specify the tools used for the calculation of GHGs. This information may be a repetition of the general methodological issues of the category. If this is the case, quote the relevant section]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of this subcategory. If appropriate, include more detailed information on the methodological issues of the subcategory in Annex V.I]

* + - * 1. **Activity data of the subcategory**

[Include a specific description of the activity data sources, assumptions used, data splicing techniques, rationale for choice of data, gaps and barriers, handling of restricted data and confidentiality, etc. If activity data sources are different for each GHG source, add a paragraph explaining each source individually]

[Include a summary table for activity data of the category by GHG source for the entire time series. Unlike emission tables, in the activity data table the years should be entered as row headers, and GHG sources as column headers (see the example below and adapt it as appropriate). Please, take into account that activity data are also included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 3-52.**

[Subcategory]: activity data by GHG source (activity data unit)

| ***Year*** | ***GHG source 1*** | ***GHG source 2*** | ***GHG source 3*** | ***GHG source 4*** | ***GHG source 5*** | ***GHG source N*** |
| --- | --- | --- | --- | --- | --- | --- |
| 1990 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1991 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1992 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1993 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1994 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1995 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1996 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1997 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1998 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1999 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2000 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2001 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2002 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2003 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2004 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2005 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2006 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2007 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2008 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2009 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2010 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2011 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2012 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2013 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2014 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2015 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2016 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2017 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2018 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2019 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2020 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2021 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2022 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the activity data]

* + - * 1. **Emission factors applied in the subcategory**

[Include a specific description of the emission factor sources (if taken from the *2006 IPCC Guidelines*, clearly indicate the table where they appear), assumptions used, rationale for choice of data, gaps and barriers, etc. In the case of country-specific emission factors, also indicate where they were obtained, the method used for obtaining them (literature, research, specific models, expert opinion, etc.), and the consistency with default emission factors of the *2006 IPCC Guidelines*]

[Include a summary table for emission factors used by GHG source, especially country-specific emission factors (see the example below and adapt it as appropriate). Please, take into account that emission factors could also be included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 3-53.**

[Subcategory]: emission factors applied by GHG source

| ***GHG source*** | ***GHG*** | ***Value*** | ***Unit*** |
| --- | --- | --- | --- |
|  | CO2 | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the emission factors]

* + - 1. **Description of any flexibility applied to the subcategory**

MPG: provisions 4-6.

[Clearly indicate the provisions to which flexibility is applied, concisely clarify capacity constraints, noting that some constraints may be relevant to several provisions, and provide self-determined estimated time frames for improvements in relation to those capacity constraints]

[Include a table on the specific flexibility provisions applied. Please take into account that the illustrative example below is part of the **Flex\_Summary** spreadsheet of the CRT and, thus, the country may also quote it directly in this document]

**Table 3-54.**

[Subcategory]: flexibility provisions applied

| ***MPG flexibility provision*** | ***Gas*** | ***Description of the application of flexibility*** | ***Clarification of capacity constraint*** | ***Time frame for improvement*** | ***Progress made in addressing areas of improvement*** |
| --- | --- | --- | --- | --- | --- |
|  | CO2 |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CO2 |  |  |  |  |

Note:

Source: [], based on the **Flex\_Summary** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the flexibility applied]

* + - 1. **Uncertainty assessment and time-series consistency of the subcategory**

MPG: provisions 26, 27, 29 and 44. Provision 29 offers flexibility to countries that may need it.

[Include a specific description of the quantitative estimate and qualitative discussion of the uncertainty of the subcategory by GHG and GHG source for the starting year and the latest reporting year of the time series, indicate the main uncertainty sources (activity data or emission factors), include any other relevant qualitative description]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to uncertainty. If appropriate, include more detailed information on the uncertainty analysis of the subcategory in Annex II and quote it in this section]

[Include a specific description of how the country ensured time-series consistency for each GHG source of the subcategory, describe gaps and barriers observed, and any data splicing technique applied. It would be appropriate to apply, at a minimum, the time-series consistency activities included in the *2006 IPCC Guidelines* for each subcategory. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the time-series consistency]

* + - 1. **Subcategory-specific QA/QC and verification**

MPG: provisions 34, 35 and 46. Provisions 34 and 35 offer flexibility to countries that may need it.

[Include a specific description of quality assurance and quality control activities applied by the country for each GHG source of the subcategory. It would be appropriate to apply, at a minimum, the QA/QC activities included in the *2006 IPCC Guidelines* for each subcategory. Include any conclusion or relevant aspect that the country may want to highlight pertaining to QA/QC activities. If appropriate, include more detailed information on the subcategory QA/QC activities in Annex IV]

* + - 1. **Subcategory-specific recalculations**

MPG: provisions 28 and 43.

[Include a specific description of the recalculations, indicating the justification for recalculations or any improvement made (in response to peer reviews, methodological changes, improved activity data, etc.), and the implications or effects these recalculations had on the GHG emission trend of the subcategory]

[Include a table on the implications or effects that the recalculations had on the GHG emission trend of the subcategory (see illustrative example below). Please take into account that the table is adapted from the **Table8s1** spreadsheet of the CRT and, thus, the country may quote the CRT directly in this document]

**Table 3-55.**

[Category]: comparison between previous inventory and current inventory (kt CO2 eq)

| ***NGI*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Previous NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Current NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Difference | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Difference % | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% |  |  |
| **Total effect %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |
| **Total effect net %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |

Note:

Source: [], based on the **Table8s1** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the recalculations]

* + - 1. **Subcategory-specific planned improvements**

MPG: provision 7.

[Include a specific description of the activities applied, in the process of being applied, or planned to improve the quality of the subcategory (methods, activity data, emission factors, etc.), including, in particular, monitoring of activities detected by peer review processes or other review processes or previous analyses. It would probably be appropriate to include a table to systematize improvement activities. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the improvement plan]

* + 1. **Injection and storage (CRT 1.C.2)**
       1. **Description and trend of GHGs in the subcategory**

MPG: provisions 47, 48, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

[Include a theoretical description of the subcategory and its GHG sources pursuant to the *2006 IPCC Guidelines* only if deemed relevant. In addition, include a practical description of the subcategory in the country, indicating what GHG sources are present, their relevance at the national level and a completeness summary]

[Include a description of the subcategory's GHGs, in kt CO2 eq, and an explanation on: (1) percentage contribution of the subcategory to the sector's total emissions in the latest inventory year and its percentage change over time; (2) emissions of the latest inventory year, and their key drivers; (3) percentage contribution of each GHG source in the latest inventory year; (4) variation between the base year and the latest inventory year, and its key drivers; (5) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (6) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total GHG emissions of the subcategory by GHG source (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 3-56.**

[Subcategory]: total GHG emissions by source (kt CO2 eq)

| ***Source*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of total GHG emissions of the subcategory by GHG source (in kt CO2 eq), 1990-2022]

**Figure 3-17.**

[Subcategory]: total GHG emissions by source (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the subcategory or its GHG sources]

* + - 1. **Methodological issues of the subcategory**

MPG: provisions 17, 20-24, 39 and 40.

[Include a specific description of the methods and methodological tiers applied in the subcategory, describe or specify equations applied and their direct reference to the *2006 IPCC Guidelines* or other guidelines used by the country. In addition, it would be appropriate to specify the tools used for the calculation of GHGs. This information may be a repetition of the general methodological issues of the category. If this is the case, quote the relevant section]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of this subcategory. If appropriate, include more detailed information on the methodological issues of the subcategory in Annex V.I]

* + - * 1. **Activity data of the subcategory**

[Include a specific description of the activity data sources, assumptions used, data splicing techniques, rationale for choice of data, gaps and barriers, handling of restricted data and confidentiality, etc. If activity data sources are different for each GHG source, add a paragraph explaining each source individually]

[Include a summary table for activity data of the category by GHG source for the entire time series. Unlike emission tables, in the activity data table the years should be entered as row headers, and GHG sources as column headers (see the example below and adapt it as appropriate). Please, take into account that activity data are also included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 3-57.**

[Subcategory]: activity data by GHG source (activity data unit)

| ***Year*** | ***GHG source 1*** | ***GHG source 2*** | ***GHG source 3*** | ***GHG source 4*** | ***GHG source 5*** | ***GHG source N*** |
| --- | --- | --- | --- | --- | --- | --- |
| 1990 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1991 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1992 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1993 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1994 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1995 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1996 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1997 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1998 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1999 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2000 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2001 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2002 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2003 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2004 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2005 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2006 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2007 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2008 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2009 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2010 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2011 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2012 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2013 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2014 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2015 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2016 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2017 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2018 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2019 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2020 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2021 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2022 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the activity data]

* + - * 1. **Emission factors applied in the subcategory**

[Include a specific description of the emission factor sources (if taken from the *2006 IPCC Guidelines*, clearly indicate the table where they appear), assumptions used, rationale for choice of data, gaps and barriers, etc. In the case of country-specific emission factors, also indicate where they were obtained, the method used for obtaining them (literature, research, specific models, expert opinion, etc.), and the consistency with default emission factors of the *2006 IPCC Guidelines*]

[Include a summary table for emission factors used by GHG source, especially country-specific emission factors (see the example below and adapt it as appropriate). Please, take into account that emission factors could also be included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 3-58.**

[Subcategory]: emission factors applied by GHG source

| ***GHG source*** | ***GHG*** | ***Value*** | ***Unit*** |
| --- | --- | --- | --- |
|  | CO2 | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the emission factors]

* + - 1. **Description of any flexibility applied to the subcategory**

MPG: provisions 4-6.

[Clearly indicate the provisions to which flexibility is applied, concisely clarify capacity constraints, noting that some constraints may be relevant to several provisions, and provide self-determined estimated time frames for improvements in relation to those capacity constraints]

[Include a table on the specific flexibility provisions applied. Please take into account that the illustrative example below is part of the **Flex\_Summary** spreadsheet of the CRT and, thus, the country may also quote it directly in this document]

**Table 3-59.**

[Subcategory]: flexibility provisions applied

| ***MPG flexibility provision*** | ***Gas*** | ***Description of the application of flexibility*** | ***Clarification of capacity constraint*** | ***Time frame for improvement*** | ***Progress made in addressing areas of improvement*** |
| --- | --- | --- | --- | --- | --- |
|  | CO2 |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CO2 |  |  |  |  |

Note:

Source: [], based on the **Flex\_Summary** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the flexibility applied]

* + - 1. **Uncertainty assessment and time-series consistency of the subcategory**

MPG: provisions 26, 27, 29 and 44. Provision 29 offers flexibility to countries that may need it.

[Include a specific description of the quantitative estimate and qualitative discussion of the uncertainty of the subcategory by GHG and GHG source for the starting year and the latest reporting year of the time series, indicate the main uncertainty sources (activity data or emission factors), include any other relevant qualitative description]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to uncertainty. If appropriate, include more detailed information on the uncertainty analysis of the subcategory in Annex II and quote it in this section]

[Include a specific description of how the country ensured time-series consistency for each GHG source of the subcategory, describe gaps and barriers observed, and any data splicing technique applied. It would be appropriate to apply, at a minimum, the time-series consistency activities included in the *2006 IPCC Guidelines* for each subcategory. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the time-series consistency]

* + - 1. **Subcategory-specific QA/QC and verification**

MPG: provisions 34, 35 and 46. Provisions 34 and 35 offer flexibility to countries that may need it.

[Include a specific description of quality assurance and quality control activities applied by the country for each GHG source of the subcategory. It would be appropriate to apply, at a minimum, the QA/QC activities included in the *2006 IPCC Guidelines* for each subcategory. Include any conclusion or relevant aspect that the country may want to highlight pertaining to QA/QC activities. If appropriate, include more detailed information on the subcategory QA/QC activities in Annex IV]

* + - 1. **Subcategory-specific recalculations**

MPG: provisions 28 and 43.

[Include a specific description of the recalculations, indicating the justification for recalculations or any improvement made (in response to peer reviews, methodological changes, improved activity data, etc.), and the implications or effects these recalculations had on the GHG emission trend of the subcategory]

[Include a table on the implications or effects that the recalculations had on the GHG emission trend of the subcategory (see illustrative example below). Please take into account that the table is adapted from the **Table8s1** spreadsheet of the CRT and, thus, the country may quote the CRT directly in this document]

**Table 3-60.**

[Category]: comparison between previous inventory and current inventory (kt CO2 eq)

| ***NGI*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Previous NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Current NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Difference | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Difference % | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% |  |  |
| **Total effect %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |
| **Total effect net %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |

Note:

Source: [], based on the **Table8s1** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the recalculations]

* + - 1. **Subcategory-specific planned improvements**

MPG: provision 7.

[Include a specific description of the activities applied, in the process of being applied, or planned to improve the quality of the subcategory (methods, activity data, emission factors, etc.), including, in particular, monitoring of activities detected by peer review processes or other review processes or previous analyses. It would probably be appropriate to include a table to systematize improvement activities. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the improvement plan]

1. **INDUSTRIAL PROCESSES AND PRODUCT USE (CRT 2)**
   1. **Overview of the sector**

MPG: provisions 47-51, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

* + 1. **Description of the sector**

[Include a theoretical description of the sector, its categories or GHG sources pursuant to the *2006 IPCC Guidelines* only if deemed relevant by the country. In addition, include a practical description of the sector in the country, indicating what categories or GHG sources are present, their relevance at the national level and a completeness summary]

* + 1. **Trend in the sector's GHG**

[Include the sector's report table for the latest inventory year by categories and subcategories, and an explanation on emissions by each GHG and precursor gas in the total emissions for the sector (kt for each GHG and precursor)]

**Table 4-1.**

IPPU Sector: emissions by GHG, category and subcategory (kt) for [latest inventory year]

| ***Code*** | ***GHG source categories*** | ***CO2***  ***(kt)*** | ***CH4***  ***(kt)*** | ***N2O***  ***(kt)*** | ***HFC*** ***(kt CO2 eq)*** | ***PFC*** ***(kt CO2 eq)*** | ***Unspecified mix of HFCs and PFCs*** ***(kt CO2 eq)*** | ***SF6***  ***(kt)*** | ***NF3*** ***(kt)*** | ***NOx***  ***(kt)*** | ***CO***  ***(kt)*** | ***NMVOC*** ***(kt)*** | ***SOX***  ***(kt)*** | ***Total GHG***  ***(kt CO2 eq)*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **2.** | **Industrial processes and product use** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.A. | Mineral industry |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.A.1. | Cement production |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.A.2. | Lime production |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.A.3. | Glass production |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.A.4. | Other process uses of carbonates |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.A.5. | Other (please specify) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.B. | Chemical industry |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.B.1. | Ammonia production |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.B.2. | Nitric acid production |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.B.3. | Adipic acid production |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.B.4. | Caprolactam, glyoxal and glyoxylic acid production |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.B.5. | Carbide production |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.B.6. | Titanium dioxide production |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.B.7. | Soda ash production |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.B.8. | Petrochemical and carbon black production |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.B.9. | Fluorochemical production |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.B.10. | Other (please specify) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.C. | Metal industry |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.C.1. | Iron and steel production |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.C.2. | Ferroalloys production |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.C.3. | Aluminium production |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.C.4. | Magnesium production |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.C.5. | Lead production |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.C.6. | Zinc production |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.C.7. | Other (please specify) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.D. | Non-energy products from fuels and solvent use |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.D.1. | Lubricant use |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.D.2. | Paraffin wax use |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.D.3. | Other (please specify) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.E. | Electronic industry |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.E.1. | Integrated circuit or semiconductor |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.E.2. | TFT flat panel display |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.E.3. | Photovoltaics |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.E.4. | Heat transfer fluid |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.E.5. | Other (please specify) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.F. | Product uses as substitutes for ODS |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.F.1. | Refrigeration and air conditioning |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.F.2. | Foam blowing agents |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.F.3. | Fire protection |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.F.4. | Aerosols |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.F.5. | Solvents |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.F.6. | Other applications |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.G. | Other product manufacture and use |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.G.1. | Electrical equipment |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.G.2. | SF6 and PFCs from other product use |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.G.3. | N2O from product uses |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.G.4. | Other |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.H. | Other (please specify) |  |  |  |  |  |  |  |  |  |  |  |  |  |

Note: Use the following notation keys where numerical data are not available: NA = not applicable; NE = not estimated; NO = not occurring; IE = included elsewhere; C = confidential.

Source: [], based on the **Table2(I)** spreadsheet of the CRT.

[Include a description of the sector's GHGs, in kt CO2 eq, and an explanation on: (1) percentage contribution of the sector to national total emissions and national total net emissions in the latest inventory year and its percentage change over time; (2) emissions of the latest inventory year, and their key drivers; (3) percentage contribution of each category or subcategory in the latest inventory year; (4) variation between the base year and the latest inventory year, and its key drivers; (5) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (6) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total GHG emissions of the sector inventory by category or subcategory (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 4-2.**

IPPU Sector: total GHG emissions by category (kt CO2 eq)

| ***Category*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source: [], based on the **Table10s1** spreadsheet of the CRT.

[Include a summary figure of total GHG emissions of the sector inventory by category or subcategory (in kt CO2 eq), 1990-2022]

**Figure 4-1.**

IPPU Sector: total GHG emissions by category or subcategory (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the sector trend]

[Include a description of each GHG (CO2, CH4, N2O, HFC, PFC, SF6 and NF3), in kt CO2 eq, and an explanation on: (1) emissions by GHG of the latest inventory year, and their key drivers; (2) percentage contribution of each GHG in the latest inventory year; (3) variation between the base year and the latest inventory year by GHG, and its key drivers; (4) variation compared to the latest inventory year of the previous inventory by GHG, and its key drivers; and (5) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year by GHG, and its key drivers]

[It is important to note that, if the country reports information on HFC, PFC, SF6 and NF3, it should include actual emissions of these gases, providing disaggregated data by chemical (for example, HFC-134a) and category in units of mass and in CO2 eq]

[Include a summary table on each GHG of the sector inventory. At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 4-3.**

IPPU sector: emissions by GHG (kt CO2 eq)

| ***GHG*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| CO2 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| CH4 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| N2O | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| HFC | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| [chemical 1] | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| [chemical 2] | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| [chemical N] | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| PFC | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| [chemical 1] | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| [chemical 2] | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| [chemical N] | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Unspecified mix of HFCs and PFCs | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| SF6 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| [chemical 1] | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| [chemical 2] | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| [chemical N] | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| NF3 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| [chemical 1] | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| [chemical 2] | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| [chemical N] | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note: Use the following notation keys where numerical data are not available: NA = not applicable; NE = not estimated; NO = not occurring; IE = included elsewhere; C = confidential.

Source: Source: [], based on the **Table10s5** spreadsheet of the CRT.

[Include a summary figure of each GHG of the sector inventory (kt CO2 eq), 1990-2022]

**Figure 4-2.**

IPPU sector: emissions by GHG (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the GHG trend in the sector inventory by GHG]

[Include a very brief description of each precursor (NOx, CO, NMVOC and SOX), and an explanation on: (1) emissions by precursor of the latest inventory year, and their key drivers; (2) percentage contribution of each precursor in the latest inventory year; (3) variation between the base year and the latest inventory year by precursor, and its key drivers; (4) variation compared to the latest inventory year of the previous inventory by precursor, and its key drivers; and (5) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year by precursor, and its key drivers]

[Include a summary table on each precursor of the sector inventory. At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 4-4.**

IPPU sector: emissions by precursor (kt)

| ***Precursor*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| NOx | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| CO | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| NMVOC | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| SOX | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of each precursor of the sector inventory (kt), 1990-2022]

**Figure 4-3.**

IPPU sector: emissions by precursor (kt), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the precursor trend in the sector inventory by precursor]

[If appropriate, include a very brief description of each of the other substances that have an impact on climate (for example, carbon black emissions, tropospheric ozone, particulate matter, other short-lived climate pollutants, etc.), in kt, and an explanation on: (1) emissions by other substances of the latest inventory year, and their key drivers; (2) percentage contribution of other substances in the latest inventory year; (3) variation between the base year and the latest inventory year for other substances, and its key drivers; (4) variation compared to the latest inventory year of the previous inventory for other substances, and its key drivers; and (5) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year for other substances, and its key drivers]

[Include, if appropriate, a summary table on each of the other substances that have an impact on climate of the sector inventory. At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 4-5.**

IPPU sector: emissions of other substances that have an impact on climate (kt)

| ***Substance*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include, if appropriate, a figure summary on each of the other substances that have an impact on climate of the sector inventory (kt), 1990-2022]

**Figure 4-4.**

IPPU sector: emissions of other substances that have an impact on climate (kt), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include, if appropriate, any conclusion or relevant aspect that the country may want to highlight pertaining to the trend in other substances that have an impact on climate of the sector inventory by substance]

* + 1. **General methodological issues of the sector**

MPG: provisions 17, 20-24, 39 and 40.

[Include a very general description of methods and methodological tiers applied, and tools used to calculate GHGs, precursor gases, and, if appropriate, other substances that have an impact on climate (for example, carbon black)]

[If a country is unable to adopt a higher tier method for a specific key category due to lack of resources, the country can use a tier 1 approach. In such cases, the country should clearly document why the methodological choice was not in line with the corresponding decision tree of the *2006 IPCC Guidelines*]

[Include a very general description of the activity data sources for the sector]

[Include a very general description of the emission factor sources. For country-specific emission factors, indicate where they were obtained and which of the subsequent sections provides more information]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of the sector. If appropriate, include more detailed information on the methodological issues of the sector in Annex V.II. In the case of other substances that have an impact on climate (for example, carbon black), include details on its methodological issues in Annex V.VI]

* 1. **Mineral industry (CRT 2.A)**
     1. **Description and trend of GHGs in the category**

MPG: provisions 47, 48, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

[Include a theoretical description of the category, its subcategories or GHG sources pursuant to the *2006 IPCC Guidelines* only if deemed relevant. In addition, include a practical description of the category in the country, indicating what subcategories or GHG sources are present, their relevance at the national level and a completeness summary]

[Include a description of the category's GHGs, in kt CO2 eq, and an explanation on: (1) percentage contribution of the category to the sector's total emissions in the latest inventory year and its percentage change over time; (2) emissions of the latest inventory year, and their key drivers; (3) percentage contribution of each GHG source in the latest inventory year; (4) variation between the base year and the latest inventory year, and its key drivers; (5) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (6) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total GHG emissions of the category by GHG source (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 4-6.**

[Category]: total GHG emissions by source (kt CO2 eq)

| ***Subcategory*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of total GHG emissions of the category by GHG source (in kt CO2 eq), 1990-2022]

**Figure 4-5.**

[Category]: total GHG emissions by source (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the category or subcategory or its GHG sources]

* + 1. **Methodological issues of the category**

MPG: provisions 17, 20-24, 39 and 40.

[Include a specific description of the methods and methodological tiers applied in the category, describe or specify equations applied and their direct reference to the *2006 IPCC Guidelines* or other guidelines used by the country. In addition, it would be appropriate to specify the tools used for the calculation of GHGs. This information may be a repetition of the general methodological issues of the category. If this is the case, quote the relevant section]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of this category. If appropriate, include more detailed information on the methodological issues of the category in Annex V.II]

* + - 1. **Activity data of the category**

[Include a specific description of the activity data sources, assumptions used, data splicing techniques, rationale for choice of data, gaps and barriers, handling of restricted data and confidentiality, etc. If activity data sources are different for each GHG source, add a paragraph explaining each source individually]

[Include a summary table for activity data of the category by GHG source for the entire time series. Unlike emission tables, in the activity data table the years should be entered as row headers, and GHG sources as column headers (see the example below and adapt it as appropriate). Please, take into account that activity data are also included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 4-7.**

[Category]: activity data by GHG source (activity data unit)

| ***Year*** | ***GHG source 1*** | ***GHG source 2*** | ***GHG source 3*** | ***GHG source 4*** | ***GHG source 5*** | ***GHG source N*** |
| --- | --- | --- | --- | --- | --- | --- |
| 1990 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1991 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1992 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1993 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1994 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1995 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1996 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1997 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1998 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1999 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2000 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2001 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2002 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2003 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2004 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2005 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2006 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2007 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2008 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2009 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2010 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2011 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2012 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2013 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2014 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2015 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2016 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2017 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2018 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2019 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2020 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2021 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2022 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the activity data]

* + - 1. **Emission factors applied in the category**

[Include a specific description of the emission factor sources (if taken from the *2006 IPCC Guidelines*, clearly indicate the table where they appear), assumptions used, rationale for choice of data, gaps and barriers, etc. In the case of country-specific emission factors, also indicate where they were obtained, the method used for obtaining them (literature, research, specific models, expert opinion, etc.), and the consistency with default emission factors of the *2006 IPCC Guidelines*]

[Include a summary table for emission factors used by GHG source, especially country-specific emission factors (see the example below and adapt it as appropriate). Please, take into account that emission factors could also be included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 4-8.**

[Category]: emission factors applied by GHG source

| ***GHG source*** | ***GHG*** | ***Value*** | ***Unit*** |
| --- | --- | --- | --- |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the emission factors]

* + 1. **Description of any flexibility applied to the category**

MPG: provisions 4-6.

[Clearly indicate the provisions to which flexibility is applied, concisely clarify capacity constraints, noting that some constraints may be relevant to several provisions, and provide self-determined estimated time frames for improvements in relation to those capacity constraints]

[Include a table on the specific flexibility provisions applied. Please take into account that the illustrative example below is part of the **Flex\_Summary** spreadsheet of the CRT and, thus, the country may also quote it directly in this document]

**Table 4-9.**

[Category]: flexibility provisions applied

| ***MPG flexibility provision*** | ***Gas*** | ***Description of the application of flexibility*** | ***Clarification of capacity constraint*** | ***Time frame for improvement*** | ***Progress made in addressing areas of improvement*** |
| --- | --- | --- | --- | --- | --- |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |

Note:

Source: [], based on the **Flex\_Summary** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the flexibility applied]

* + 1. **Uncertainty assessment and time-series consistency of the category**

MPG: provisions 26, 27, 29 and 44. Provision 29 offers flexibility to countries that may need it.

[Include a specific description of the quantitative estimate and qualitative discussion of the uncertainty of the category by GHG and GHG source for the starting year and the latest reporting year of the time series, indicate the main uncertainty sources (activity data or emission factors), include any other relevant qualitative description]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to uncertainty. If appropriate, include more detailed information on the uncertainty analysis of the category in Annex II and quote it in this section]

[Include a specific description of how the country ensured time-series consistency for each GHG source of the category, describe gaps and barriers observed, and any data splicing technique applied. It would be appropriate to apply, at a minimum, the time-series consistency activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the time-series consistency]

* + 1. **Category-specific QA/QC and verification**

MPG: provisions 34, 35 and 46. Provisions 34 and 35 offer flexibility to countries that may need it.

[Include a specific description of quality assurance and quality control activities applied by the country for each GHG source of the category. It would be appropriate to apply, at a minimum, the QA/QC activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to QA/QC activities. If appropriate, include more details on the category QA/QC activities in Annex IV]

* + 1. **Category-specific recalculations**

MPG: provisions 28 and 43.

[Include a specific description of the recalculations, indicating the justification for recalculations or any improvement made (in response to peer reviews, methodological changes, improved activity data, etc.), and the implications or effects these recalculations had on the GHG emission trend of the category]

[Include a table on the implications or effects that the recalculations had on the GHG emission trend of the category (see illustrative example below). Please take into account that the table is adapted from the **Table8s1** spreadsheet of the CRT and, thus, the country may quote the CRT directly in this document]

**Table 4-10.**

[Category]: comparison between previous inventory and current inventory (kt CO2 eq)

| ***NGI*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Previous NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Current NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Difference | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Difference % | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% |  |  |
| **Total effect %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |
| **Total effect net %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |

Note:

Source: [], based on the **Table8s1** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the recalculations]

* + 1. **Category-specific planned improvements**

MPG: provision 7.

[Include a specific description of the activities applied, in the process of being applied, or planned to improve the quality of the category (methods, activity data, emission factors, etc.), including, in particular, monitoring of activities detected by peer review processes or other review processes or previous analyses. It would probably be appropriate to include a table to systematize improvement activities. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the improvement plan]

* 1. **Chemical industry (CRT 2.B)**
     1. **Description and trend of GHGs in the category**

MPG: provisions 47, 48, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

[Include a theoretical description of the category and its subcategories or GHG sources pursuant to the *2006 IPCC Guidelines* only if deemed relevant. In addition, include a practical description of the category in the country, indicating what subcategories or GHG sources are present, their relevance at the national level and a completeness summary]

[Include a description of the category's GHGs, in kt CO2 eq, and an explanation on: (1) percentage contribution of the category to the sector's total emissions in the latest inventory year and its percentage change over time; (2) emissions of the latest inventory year, and their key drivers; (3) percentage contribution of each GHG source in the latest inventory year; (4) variation between the base year and the latest inventory year, and its key drivers; (5) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (6) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total GHG emissions of the category by GHG source (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 4-11.**

[Category]: total GHG emissions by subcategory (kt CO2 eq)

| ***Subcategory*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of total GHG emissions of the category by GHG source (in kt CO2 eq), 1990-2022]

**Figure 4-6.**

[Category]: total GHG emissions by source (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the category or subcategory or its GHG sources]

* + 1. **Methodological issues of the category**

MPG: provisions 17, 20-24, 39 and 40.

[Include a specific description of the methods and methodological tiers applied in the category, describe or specify equations applied and their direct reference to the *2006 IPCC Guidelines* or other guidelines used by the country. In addition, it would be appropriate to specify the tools used for the calculation of GHGs. This information may be a repetition of the general methodological issues of the category. If this is the case, quote the relevant section]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of this category. If appropriate, include more detailed information on the methodological issues of the category in Annex V.II]

* + - 1. **Activity data of the category**

[Include a specific description of the activity data sources, assumptions used, data splicing techniques, rationale for choice of data, gaps and barriers, handling of restricted data and confidentiality, etc. If activity data sources are different for each GHG source, add a paragraph explaining each source individually]

[Include a summary table for activity data of the category by GHG source for the entire time series. Unlike emission tables, in the activity data table the years should be entered as row headers, and GHG sources as column headers (see the example below and adapt it as appropriate). Please, take into account that activity data are also included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 4-12.**

[Category]: activity data by GHG source (activity data unit)

| ***Year*** | ***GHG source 1*** | ***GHG source 2*** | ***GHG source 3*** | ***GHG source 4*** | ***GHG source 5*** | ***GHG source N*** |
| --- | --- | --- | --- | --- | --- | --- |
| 1990 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1991 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1992 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1993 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1994 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1995 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1996 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1997 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1998 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1999 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2000 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2001 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2002 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2003 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2004 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2005 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2006 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2007 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2008 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2009 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2010 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2011 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2012 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2013 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2014 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2015 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2016 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2017 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2018 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2019 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2020 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2021 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2022 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the activity data]

* + - 1. **Emission factors applied in the category**

[Include a specific description of the emission factor sources (if taken from the *2006 IPCC Guidelines*, clearly indicate the table where they appear), assumptions used, rationale for choice of data, gaps and barriers, etc. In the case of country-specific emission factors, also indicate where they were obtained, the method used for obtaining them (literature, research, specific models, expert opinion, etc.), and the consistency with default emission factors of the *2006 IPCC Guidelines*]

[Include a summary table for emission factors used by GHG source, especially country-specific emission factors (see the example below and adapt it as appropriate). Please, take into account that emission factors could also be included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 4-13.**

[Category]: emission factors applied by GHG source

| ***GHG source*** | ***GHG*** | ***Value*** | ***Unit*** |
| --- | --- | --- | --- |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the emission factors]

* + 1. **Description of any flexibility applied to the category**

MPG: provisions 4-6.

[Clearly indicate the provisions to which flexibility is applied, concisely clarify capacity constraints, noting that some constraints may be relevant to several provisions, and provide self-determined estimated time frames for improvements in relation to those capacity constraints]

[Include a table on the specific flexibility provisions applied. Please take into account that the illustrative example below is part of the **Flex\_Summary** spreadsheet of the CRT and, thus, the country may also quote it directly in this document]

**Table 4-14.**

[Category]: flexibility provisions applied

| ***MPG flexibility provision*** | ***Gas*** | ***Description of the application of flexibility*** | ***Clarification of capacity constraint*** | ***Time frame for improvement*** | ***Progress made in addressing areas of improvement*** |
| --- | --- | --- | --- | --- | --- |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |

Note:

Source: [], based on the **Flex\_Summary** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the flexibility applied]

* + 1. **Uncertainty assessment and time-series consistency of the category**

MPG: provisions 26, 27, 29 and 44. Provision 29 offers flexibility to countries that may need it.

[Include a specific description of the quantitative estimate and qualitative discussion of the uncertainty of the category by GHG and GHG source for the starting year and the latest reporting year of the time series, indicate the main uncertainty sources (activity data or emission factors), include any other relevant qualitative description]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to uncertainty. If appropriate, include more detailed information on the uncertainty analysis of the category in Annex II and quote it in this section]

[Include a specific description of how the country ensured time-series consistency for each GHG source of the category, describe gaps and barriers observed, and any data splicing technique applied. It would be appropriate to apply, at a minimum, the time-series consistency activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the time-series consistency]

* + 1. **Category-specific QA/QC and verification**

MPG: provisions 34, 35 and 46. Provisions 34 and 35 offer flexibility to countries that may need it.

[Include a specific description of quality assurance and quality control activities applied by the country for each GHG source of the category. It would be appropriate to apply, at a minimum, the QA/QC activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to QA/QC activities. If appropriate, include more details on the category QA/QC activities in Annex IV]

* + 1. **Category-specific recalculations**

MPG: provisions 28 and 43.

[Include a specific description of the recalculations, indicating the justification for recalculations or any improvement made (in response to peer reviews, methodological changes, improved activity data, etc.), and the implications or effects these recalculations had on the GHG emission trend of the category]

[Include a table on the implications or effects that the recalculations had on the GHG emission trend of the category (see illustrative example below). Please take into account that the table is adapted from the **Table8s1** spreadsheet of the CRT and, thus, the country may quote the CRT directly in this document]

**Table 4-15.**

[Category]: comparison between previous inventory and current inventory (kt CO2 eq)

| ***NGI*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Previous NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Current NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Difference | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Difference % | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% |  |  |
| **Total effect %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |
| **Total effect net %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |

Note:

Source: [], based on the **Table8s1** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the recalculations]

* + 1. **Category-specific planned improvements**

MPG: provision 7.

[Include a specific description of the activities applied, in the process of being applied, or planned to improve the quality of the category (methods, activity data, emission factors, etc.), including, in particular, monitoring of activities detected by peer review processes or other review processes or previous analyses. It would probably be appropriate to include a table to systematize improvement activities. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the improvement plan]

* 1. **Metal industry (CRT 2.C)**
     1. **Description and trend of GHGs in the category**

MPG: provisions 47, 48, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

[Include a theoretical description of the category and its subcategories or GHG sources pursuant to the *2006 IPCC Guidelines* only if deemed relevant. In addition, include a practical description of the category in the country, indicating what subcategories or GHG sources are present, their relevance at the national level and a completeness summary]

[Include a description of the category's GHGs, in kt CO2 eq, and an explanation on: (1) percentage contribution of the category to the sector's total emissions in the latest inventory year and its percentage change over time; (2) emissions of the latest inventory year, and their key drivers; (3) percentage contribution of each GHG source in the latest inventory year; (4) variation between the base year and the latest inventory year, and its key drivers; (5) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (6) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total GHG emissions of the category by GHG source (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 4-16.**

[Category]: total GHG emissions by subcategory (kt CO2 eq)

| ***Subcategory*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of total GHG emissions of the category by GHG source (in kt CO2 eq), 1990-2022]

**Figure 4-7.**

[Category]: total GHG emissions by source (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the category or subcategory or its GHG sources]

* + 1. **Methodological issues of the category**

MPG: provisions 17, 20-24, 39 and 40.

[Include a specific description of the methods and methodological tiers applied in the category, describe or specify equations applied and their direct reference to the *2006 IPCC Guidelines* or other guidelines used by the country. In addition, it would be appropriate to specify the tools used for the calculation of GHGs. This information may be a repetition of the general methodological issues of the category. If this is the case, quote the relevant section]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of this category. If appropriate, include more detailed information on the methodological issues of the category in Annex V.II]

* + - 1. **Activity data of the category**

[Include a specific description of the activity data sources, assumptions used, data splicing techniques, rationale for choice of data, gaps and barriers, handling of restricted data and confidentiality, etc. If activity data sources are different for each GHG source, add a paragraph explaining each source individually]

[Include a summary table for activity data of the category by GHG source for the entire time series. Unlike emission tables, in the activity data table the years should be entered as row headers, and GHG sources as column headers (see the example below and adapt it as appropriate). Please, take into account that activity data are also included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 4-17.**

[Category]: activity data by GHG source (activity data unit)

| ***Year*** | ***GHG source 1*** | ***GHG source 2*** | ***GHG source 3*** | ***GHG source 4*** | ***GHG source 5*** | ***GHG source N*** |
| --- | --- | --- | --- | --- | --- | --- |
| 1990 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1991 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1992 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1993 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1994 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1995 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1996 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1997 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1998 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1999 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2000 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2001 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2002 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2003 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2004 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2005 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2006 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2007 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2008 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2009 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2010 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2011 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2012 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2013 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2014 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2015 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2016 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2017 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2018 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2019 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2020 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2021 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2022 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the activity data]

* + - 1. **Emission factors applied in the category**

[Include a specific description of the emission factor sources (if taken from the *2006 IPCC Guidelines*, clearly indicate the table where they appear), assumptions used, rationale for choice of data, gaps and barriers, etc. In the case of country-specific emission factors, also indicate where they were obtained, the method used for obtaining them (literature, research, specific models, expert opinion, etc.), and the consistency with default emission factors of the *2006 IPCC Guidelines*]

[Include a summary table for emission factors used by GHG source, especially country-specific emission factors (see the example below and adapt it as appropriate). Please, take into account that emission factors could also be included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 4-18.**

[Category]: emission factors applied by GHG source

| ***GHG source*** | ***GHG*** | ***Value*** | ***Unit*** |
| --- | --- | --- | --- |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the emission factors]

* + 1. **Description of any flexibility applied to the category**

MPG: provisions 4-6.

[Clearly indicate the provisions to which flexibility is applied, concisely clarify capacity constraints, noting that some constraints may be relevant to several provisions, and provide self-determined estimated time frames for improvements in relation to those capacity constraints]

[Include a table on the specific flexibility provisions applied. Please take into account that the illustrative example below is part of the **Flex\_Summary** spreadsheet of the CRT and, thus, the country may also quote it directly in this document]

**Table 4-19.**

[Category]: flexibility provisions applied

| ***MPG flexibility provision*** | ***Gas*** | ***Description of the application of flexibility*** | ***Clarification of capacity constraint*** | ***Time frame for improvement*** | ***Progress made in addressing areas of improvement*** |
| --- | --- | --- | --- | --- | --- |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |

Note:

Source: [], based on the **Flex\_Summary** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the flexibility applied]

* + 1. **Uncertainty assessment and time-series consistency of the category**

MPG: provisions 26, 27, 29 and 44. Provision 29 offers flexibility to countries that may need it.

[Include a specific description of the quantitative estimate and qualitative discussion of the uncertainty of the category by GHG and GHG source for the starting year and the latest reporting year of the time series, indicate the main uncertainty sources (activity data or emission factors), include any other relevant qualitative description]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to uncertainty. If appropriate, include more detailed information on the uncertainty analysis of the category in Annex II and quote it in this section]

[Include a specific description of how the country ensured time-series consistency for each GHG source of the category, describe gaps and barriers observed, and any data splicing technique applied. It would be appropriate to apply, at a minimum, the time-series consistency activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the time-series consistency]

* + 1. **Category-specific QA/QC and verification**

MPG: provisions 34, 35 and 46. Provisions 34 and 35 offer flexibility to countries that may need it.

[Include a specific description of quality assurance and quality control activities applied by the country for each GHG source of the category. It would be appropriate to apply, at a minimum, the QA/QC activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to QA/QC activities. If appropriate, include more details on the category QA/QC activities in Annex IV]

* + 1. **Category-specific recalculations**

MPG: provisions 28 and 43.

[Include a specific description of the recalculations, indicating the justification for recalculations or any improvement made (in response to peer reviews, methodological changes, improved activity data, etc.), and the implications or effects these recalculations had on the GHG emission trend of the category]

[Include a table on the implications or effects that the recalculations had on the GHG emission trend of the category (see illustrative example below). Please take into account that the table is adapted from the **Table8s1** spreadsheet of the CRT and, thus, the country may quote the CRT directly in this document]

**Table 4-20.**

[Category]: comparison between previous inventory and current inventory (kt CO2 eq)

| ***NGI*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Previous NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Current NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Difference | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Difference % | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% |  |  |
| **Total effect %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |
| **Total effect net %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |

Note:

Source: [], based on the **Table8s1** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the recalculations]

* + 1. **Category-specific planned improvements**

MPG: provision 7.

[Include a specific description of the activities applied, in the process of being applied, or planned to improve the quality of the category (methods, activity data, emission factors, etc.), including, in particular, monitoring of activities detected by peer review processes or other review processes or previous analyses. It would probably be appropriate to include a table to systematize improvement activities. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the improvement plan]

* 1. **Non-energy products from fuels and solvent use (CRT 2.D)**
     1. **Description and trend of GHGs in the category**

MPG: provisions 47, 48, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

[Include a theoretical description of the category and its subcategories or GHG sources pursuant to the *2006 IPCC Guidelines* only if deemed relevant. In addition, include a practical description of the category in the country, indicating what subcategories or GHG sources are present, their relevance at the national level and a completeness summary]

[Include a description of the category's GHGs, in kt CO2 eq, and an explanation on: (1) percentage contribution of the category to the sector's total emissions in the latest inventory year and its percentage change over time; (2) emissions of the latest inventory year, and their key drivers; (3) percentage contribution of each GHG source in the latest inventory year; (4) variation between the base year and the latest inventory year, and its key drivers; (5) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (6) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total GHG emissions of the category by GHG source (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 4-21.**

[Category]: total GHG emissions by subcategory (kt CO2 eq)

| ***Subcategory*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of total GHG emissions of the category by GHG source (in kt CO2 eq), 1990-2022]

**Figure 4-8.**

[Category]: total GHG emissions by source (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the category or subcategory or its GHG sources]

* + 1. **Methodological issues of the category**

MPG: provisions 17, 20-24, 39 and 40.

[Include a specific description of the methods and methodological tiers applied in the category, describe or specify equations applied and their direct reference to the *2006 IPCC Guidelines* or other guidelines used by the country. In addition, it would be appropriate to specify the tools used for the calculation of GHGs. This information may be a repetition of the general methodological issues of the category. If this is the case, quote the relevant section]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of this category. If appropriate, include more detailed information on the methodological issues of the category in Annex V.II]

* + - 1. **Activity data of the category**

[Include a specific description of the activity data sources, assumptions used, data splicing techniques, rationale for choice of data, gaps and barriers, handling of restricted data and confidentiality, etc. If activity data sources are different for each GHG source, add a paragraph explaining each source individually]

[Include a summary table for activity data of the category by GHG source for the entire time series. Unlike emission tables, in the activity data table the years should be entered as row headers, and GHG sources as column headers (see the example below and adapt it as appropriate). Please, take into account that activity data are also included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 4-22.**

[Category]: activity data by GHG source (activity data unit)

| ***Year*** | ***GHG source 1*** | ***GHG source 2*** | ***GHG source 3*** | ***GHG source 4*** | ***GHG source 5*** | ***GHG source N*** |
| --- | --- | --- | --- | --- | --- | --- |
| 1990 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1991 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1992 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1993 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1994 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1995 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1996 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1997 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1998 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1999 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2000 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2001 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2002 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2003 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2004 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2005 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2006 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2007 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2008 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2009 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2010 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2011 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2012 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2013 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2014 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2015 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2016 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2017 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2018 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2019 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2020 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2021 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2022 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the activity data]

* + - 1. **Emission factors applied in the category**

[Include a specific description of the emission factor sources (if taken from the *2006 IPCC Guidelines*, clearly indicate the table where they appear), assumptions used, rationale for choice of data, gaps and barriers, etc. In the case of country-specific emission factors, also indicate where they were obtained, the method used for obtaining them (literature, research, specific models, expert opinion, etc.), and the consistency with default emission factors of the *2006 IPCC Guidelines*]

[Include a summary table for emission factors used by GHG source, especially country-specific emission factors (see the example below and adapt it as appropriate). Please, take into account that emission factors could also be included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 4-23.**

[Category]: emission factors applied by GHG source

| ***GHG source*** | ***GHG*** | ***Value*** | ***Unit*** |
| --- | --- | --- | --- |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the emission factors]

* + 1. **Description of any flexibility applied to the category**

MPG: provisions 4-6.

[Clearly indicate the provisions to which flexibility is applied, concisely clarify capacity constraints, noting that some constraints may be relevant to several provisions, and provide self-determined estimated time frames for improvements in relation to those capacity constraints]

[Include a table on the specific flexibility provisions applied. Please take into account that the illustrative example below is part of the **Flex\_Summary** spreadsheet of the CRT and, thus, the country may also quote it directly in this document]

**Table 4-24.**

[Category]: flexibility provisions applied

| ***MPG flexibility provision*** | ***Gas*** | ***Description of the application of flexibility*** | ***Clarification of capacity constraint*** | ***Time frame for improvement*** | ***Progress made in addressing areas of improvement*** |
| --- | --- | --- | --- | --- | --- |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |

Note:

Source: [], based on the **Flex\_Summary** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the flexibility applied]

* + 1. **Uncertainty assessment and time-series consistency of the category**

MPG: provisions 26, 27, 29 and 44. Provision 29 offers flexibility to countries that may need it.

[Include a specific description of the quantitative estimate and qualitative discussion of the uncertainty of the category by GHG and GHG source for the starting year and the latest reporting year of the time series, indicate the main uncertainty sources (activity data or emission factors), include any other relevant qualitative description]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to uncertainty. If appropriate, include more detailed information on the uncertainty analysis of the category in Annex II and quote it in this section]

[Include a specific description of how the country ensured time-series consistency for each GHG source of the category, describe gaps and barriers observed, and any data splicing technique applied. It would be appropriate to apply, at a minimum, the time-series consistency activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the time-series consistency]

* + 1. **Category-specific QA/QC and verification**

MPG: provisions 34, 35 and 46. Provisions 34 and 35 offer flexibility to countries that may need it.

[Include a specific description of quality assurance and quality control activities applied by the country for each GHG source of the category. It would be appropriate to apply, at a minimum, the QA/QC activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to QA/QC activities. If appropriate, include more details on the category QA/QC activities in Annex IV]

* + 1. **Category-specific recalculations**

MPG: provisions 28 and 43.

[Include a specific description of the recalculations, indicating the justification for recalculations or any improvement made (in response to peer reviews, methodological changes, improved activity data, etc.), and the implications or effects these recalculations had on the GHG emission trend of the category]

[Include a table on the implications or effects that the recalculations had on the GHG emission trend of the category (see illustrative example below). Please take into account that the table is adapted from the **Table8s1** spreadsheet of the CRT and, thus, the country may quote the CRT directly in this document]

**Table 4-25.**

[Category]: comparison between previous inventory and current inventory (kt CO2 eq)

| ***NGI*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Previous NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Current NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Difference | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Difference % | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% |  |  |
| **Total effect %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |
| **Total effect net %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |

Note:

Source: [], based on the **Table8s1** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the recalculations]

* + 1. **Category-specific planned improvements**

MPG: provision 7.

[Include a specific description of the activities applied, in the process of being applied, or planned to improve the quality of the category (methods, activity data, emission factors, etc.), including, in particular, monitoring of activities detected by peer review processes or other review processes or previous analyses. It would probably be appropriate to include a table to systematize improvement activities. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the improvement plan]

* 1. **Electronic industry (CRT 2.E)**
     1. **Description and trend of GHGs in the category**

MPG: provisions 47, 48, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

[Include a theoretical description of the category and its subcategories or GHG sources pursuant to the *2006 IPCC Guidelines* only if deemed relevant. In addition, include a practical description of the category in the country, indicating what subcategories or GHG sources are present, their relevance at the national level and a completeness summary]

[Include a description of the category's GHGs, in kt CO2 eq, and an explanation on: (1) percentage contribution of the category to the sector's total emissions in the latest inventory year and its percentage change over time; (2) emissions of the latest inventory year, and their key drivers; (3) percentage contribution of each GHG source in the latest inventory year; (4) variation between the base year and the latest inventory year, and its key drivers; (5) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (6) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total GHG emissions of the category by GHG source (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 4-26.**

[Category]: total GHG emissions by subcategory (kt CO2 eq)

| ***Subcategory*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of total GHG emissions of the category by GHG source (in kt CO2 eq), 1990-2022]

**Figure 4-9.**

[Category]: total GHG emissions by source (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the category or subcategory or its GHG sources]

* + 1. **Methodological issues of the category**

MPG: provisions 17, 20-24, 39 and 40.

[Include a specific description of the methods and methodological tiers applied in the category, describe or specify equations applied and their direct reference to the *2006 IPCC Guidelines* or other guidelines used by the country. In addition, it would be appropriate to specify the tools used for the calculation of GHGs. This information may be a repetition of the general methodological issues of the category. If this is the case, quote the relevant section]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of this category. If appropriate, include more detailed information on the methodological issues of the category in Annex V.II]

* + - 1. **Activity data of the category**

[Include a specific description of the activity data sources, assumptions used, data splicing techniques, rationale for choice of data, gaps and barriers, handling of restricted data and confidentiality, etc. If activity data sources are different for each GHG source, add a paragraph explaining each source individually]

[Include a summary table for activity data of the category by GHG source for the entire time series. Unlike emission tables, in the activity data table the years should be entered as row headers, and GHG sources as column headers (see the example below and adapt it as appropriate). Please, take into account that activity data are also included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 4-27.**

[Category]: activity data by GHG source (activity data unit)

| ***Year*** | ***GHG source 1*** | ***GHG source 2*** | ***GHG source 3*** | ***GHG source 4*** | ***GHG source 5*** | ***GHG source N*** |
| --- | --- | --- | --- | --- | --- | --- |
| 1990 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1991 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1992 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1993 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1994 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1995 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1996 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1997 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1998 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1999 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2000 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2001 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2002 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2003 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2004 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2005 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2006 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2007 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2008 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2009 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2010 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2011 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2012 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2013 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2014 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2015 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2016 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2017 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2018 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2019 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2020 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2021 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2022 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the activity data]

* + - 1. **Emission factors applied in the category**

[Include a specific description of the emission factor sources (if taken from the *2006 IPCC Guidelines*, clearly indicate the table where they appear), assumptions used, rationale for choice of data, gaps and barriers, etc. In the case of country-specific emission factors, also indicate where they were obtained, the method used for obtaining them (literature, research, specific models, expert opinion, etc.), and the consistency with default emission factors of the *2006 IPCC Guidelines*]

[Include a summary table for emission factors used by GHG source, especially country-specific emission factors (see the example below and adapt it as appropriate). Please, take into account that emission factors could also be included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 4-28.**

[Category]: emission factors applied by GHG source

| ***GHG source*** | ***GHG*** | ***Value*** | ***Unit*** |
| --- | --- | --- | --- |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the emission factors]

* + 1. **Description of any flexibility applied to the category**

MPG: provisions 4-6.

[Clearly indicate the provisions to which flexibility is applied, concisely clarify capacity constraints, noting that some constraints may be relevant to several provisions, and provide self-determined estimated time frames for improvements in relation to those capacity constraints]

[Include a table on the specific flexibility provisions applied. Please take into account that the illustrative example below is part of the **Flex\_Summary** spreadsheet of the CRT and, thus, the country may also quote it directly in this document]

**Table 4-29.**

[Category]: flexibility provisions applied

| ***MPG flexibility provision*** | ***Gas*** | ***Description of the application of flexibility*** | ***Clarification of capacity constraint*** | ***Time frame for improvement*** | ***Progress made in addressing areas of improvement*** |
| --- | --- | --- | --- | --- | --- |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |

Note:

Source: [], based on the **Flex\_Summary** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the flexibility applied]

* + 1. **Uncertainty assessment and time-series consistency of the category**

MPG: provisions 26, 27, 29 and 44. Provision 29 offers flexibility to countries that may need it.

[Include a specific description of the quantitative estimate and qualitative discussion of the uncertainty of the category by GHG and GHG source for the starting year and the latest reporting year of the time series, indicate the main uncertainty sources (activity data or emission factors), include any other relevant qualitative description]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to uncertainty. If appropriate, include more detailed information on the uncertainty analysis of the category in Annex II and quote it in this section]

[Include a specific description of how the country ensured time-series consistency for each GHG source of the category, describe gaps and barriers observed, and any data splicing technique applied. It would be appropriate to apply, at a minimum, the time-series consistency activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the time-series consistency]

* + 1. **Category-specific QA/QC and verification**

MPG: provisions 34, 35 and 46. Provisions 34 and 35 offer flexibility to countries that may need it.

[Include a specific description of quality assurance and quality control activities applied by the country for each GHG source of the category. It would be appropriate to apply, at a minimum, the QA/QC activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to QA/QC activities. If appropriate, include more details on the category QA/QC activities in Annex IV]

* + 1. **Category-specific recalculations**

MPG: provisions 28 and 43.

[Include a specific description of the recalculations, indicating the justification for recalculations or any improvement made (in response to peer reviews, methodological changes, improved activity data, etc.), and the implications or effects these recalculations had on the GHG emission trend of the category]

[Include a table on the implications or effects that the recalculations had on the GHG emission trend of the category (see illustrative example below). Please take into account that the table is adapted from the **Table8s1** spreadsheet of the CRT and, thus, the country may quote the CRT directly in this document]

**Table 4-30.**

[Category]: comparison between previous inventory and current inventory (kt CO2 eq)

| ***NGI*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Previous NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Current NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Difference | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Difference % | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% |  |  |
| **Total effect %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |
| **Total effect net %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |

Note:

Source: [], based on the **Table8s1** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the recalculations]

* + 1. **Category-specific planned improvements**

MPG: provision 7.

[Include a specific description of the activities applied, in the process of being applied, or planned to improve the quality of the category (methods, activity data, emission factors, etc.), including, in particular, monitoring of activities detected by peer review processes or other review processes or previous analyses. It would probably be appropriate to include a table to systematize improvement activities. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the improvement plan]

* 1. **Product uses as substitutes for ODS (CRT 2.F)**
     1. **Description and trend of GHGs in the category**

MPG: provisions 47, 48, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

[Include a theoretical description of the category and its subcategories or GHG sources pursuant to the *2006 IPCC Guidelines* only if deemed relevant. In addition, include a practical description of the category in the country, indicating what subcategories or GHG sources are present, their relevance at the national level and a completeness summary]

[Include a description of the category's GHGs, in kt CO2 eq, and an explanation on: (1) percentage contribution of the category to the sector's total emissions in the latest inventory year and its percentage change over time; (2) emissions of the latest inventory year, and their key drivers; (3) percentage contribution of each GHG source in the latest inventory year; (4) variation between the base year and the latest inventory year, and its key drivers; (5) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (6) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total GHG emissions of the category by GHG source (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 4-31.**

[Category]: total GHG emissions by subcategory (kt CO2 eq)

| ***Subcategory*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of total GHG emissions of the category by GHG source (in kt CO2 eq), 1990-2022]

**Figure 4-10.**

[Category]: total GHG emissions by source (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the category or subcategory or its GHG sources]

* + 1. **Methodological issues of the category**

MPG: provisions 17, 20-24, 39 and 40.

[Include a specific description of the methods and methodological tiers applied in the category, describe or specify equations applied and their direct reference to the *2006 IPCC Guidelines* or other guidelines used by the country. In addition, it would be appropriate to specify the tools used for the calculation of GHGs. This information may be a repetition of the general methodological issues of the category. If this is the case, quote the relevant section]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of this category. If appropriate, include more detailed information on the methodological issues of the category in Annex V.II]

* + - 1. **Activity data of the category**

[Include a specific description of the activity data sources, assumptions used, data splicing techniques, rationale for choice of data, gaps and barriers, handling of restricted data and confidentiality, etc. If activity data sources are different for each GHG source, add a paragraph explaining each source individually]

[Include a summary table for activity data of the category by GHG source for the entire time series. Unlike emission tables, in the activity data table the years should be entered as row headers, and GHG sources as column headers (see the example below and adapt it as appropriate). Please, take into account that activity data are also included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 4-32.**

[Category]: activity data by GHG source (activity data unit)

| ***Year*** | ***GHG source 1*** | ***GHG source 2*** | ***GHG source 3*** | ***GHG source 4*** | ***GHG source 5*** | ***GHG source N*** |
| --- | --- | --- | --- | --- | --- | --- |
| 1990 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1991 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1992 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1993 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1994 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1995 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1996 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1997 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1998 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1999 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2000 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2001 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2002 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2003 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2004 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2005 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2006 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2007 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2008 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2009 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2010 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2011 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2012 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2013 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2014 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2015 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2016 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2017 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2018 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2019 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2020 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2021 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2022 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the activity data]

* + - 1. **Emission factors applied in the category**

[Include a specific description of the emission factor sources (if taken from the *2006 IPCC Guidelines*, clearly indicate the table where they appear), assumptions used, rationale for choice of data, gaps and barriers, etc. In the case of country-specific emission factors, also indicate where they were obtained, the method used for obtaining them (literature, research, specific models, expert opinion, etc.), and the consistency with default emission factors of the *2006 IPCC Guidelines*]

[Include a summary table for emission factors used by GHG source, especially country-specific emission factors (see the example below and adapt it as appropriate). Please, take into account that emission factors could also be included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 4-33.**

[Category]: emission factors applied by GHG source

| ***GHG source*** | ***GHG*** | ***Value*** | ***Unit*** |
| --- | --- | --- | --- |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the emission factors]

* + 1. **Description of any flexibility applied to the category**

MPG: provisions 4-6.

[Clearly indicate the provisions to which flexibility is applied, concisely clarify capacity constraints, noting that some constraints may be relevant to several provisions, and provide self-determined estimated time frames for improvements in relation to those capacity constraints]

[Include a table on the specific flexibility provisions applied. Please take into account that the illustrative example below is part of the **Flex\_Summary** spreadsheet of the CRT and, thus, the country may also quote it directly in this document]

**Table 4-34.**

[Category]: flexibility provisions applied

| ***MPG flexibility provision*** | ***Gas*** | ***Description of the application of flexibility*** | ***Clarification of capacity constraint*** | ***Time frame for improvement*** | ***Progress made in addressing areas of improvement*** |
| --- | --- | --- | --- | --- | --- |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |

Note:

Source: [], based on the **Flex\_Summary** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the flexibility applied]

* + 1. **Uncertainty assessment and time-series consistency of the category**

MPG: provisions 26, 27, 29 and 44. Provision 29 offers flexibility to countries that may need it.

[Include a specific description of the quantitative estimate and qualitative discussion of the uncertainty of the category by GHG and GHG source for the starting year and the latest reporting year of the time series, indicate the main uncertainty sources (activity data or emission factors), include any other relevant qualitative description]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to uncertainty. If appropriate, include more detailed information on the uncertainty analysis of the category in Annex II and quote it in this section]

[Include a specific description of how the country ensured time-series consistency for each GHG source of the category, describe gaps and barriers observed, and any data splicing technique applied. It would be appropriate to apply, at a minimum, the time-series consistency activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the time-series consistency]

* + 1. **Category-specific QA/QC and verification**

MPG: provisions 34, 35 and 46. Provisions 34 and 35 offer flexibility to countries that may need it.

[Include a specific description of quality assurance and quality control activities applied by the country for each GHG source of the category. It would be appropriate to apply, at a minimum, the QA/QC activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to QA/QC activities. If appropriate, include more details on the category QA/QC activities in Annex IV]

* + 1. **Category-specific recalculations**

MPG: provisions 28 and 43.

[Include a specific description of the recalculations, indicating the justification for recalculations or any improvement made (in response to peer reviews, methodological changes, improved activity data, etc.), and the implications or effects these recalculations had on the GHG emission trend of the category]

[Include a table on the implications or effects that the recalculations had on the GHG emission trend of the category (see illustrative example below). Please take into account that the table is adapted from the **Table8s1** spreadsheet of the CRT and, thus, the country may quote the CRT directly in this document]

**Table 4-35.**

[Category]: comparison between previous inventory and current inventory (kt CO2 eq)

| ***NGI*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Previous NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Current NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Difference | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Difference % | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% |  |  |
| **Total effect %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |
| **Total effect net %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |

Note:

Source: [], based on the **Table8s1** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the recalculations]

* + 1. **Category-specific planned improvements**

MPG: provision 7.

[Include a specific description of the activities applied, in the process of being applied, or planned to improve the quality of the category (methods, activity data, emission factors, etc.), including, in particular, monitoring of activities detected by peer review processes or other review processes or previous analyses. It would probably be appropriate to include a table to systematize improvement activities. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the improvement plan]

* 1. **Other product manufacture and use (CRT 2.G)**
     1. **Description and trend of GHGs in the category**

MPG: provisions 47, 48, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

[Include a theoretical description of the category and its subcategories or GHG sources pursuant to the *2006 IPCC Guidelines* only if deemed relevant. In addition, include a practical description of the category in the country, indicating what subcategories or GHG sources are present, their relevance at the national level and a completeness summary]

[Include a description of the category's GHGs, in kt CO2 eq, and an explanation on: (1) percentage contribution of the category to the sector's total emissions in the latest inventory year and its percentage change over time; (2) emissions of the latest inventory year, and their key drivers; (3) percentage contribution of each GHG source in the latest inventory year; (4) variation between the base year and the latest inventory year, and its key drivers; (5) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (6) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total GHG emissions of the category by GHG source (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 4-36.**

[Category]: total GHG emissions by subcategory (kt CO2 eq)

| ***Subcategory*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of total GHG emissions of the category by GHG source (in kt CO2 eq), 1990-2022]

**Figure 4-11.**

[Category]: total GHG emissions by source (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the category or subcategory or its GHG sources]

* + 1. **Methodological issues of the category**

MPG: provisions 17, 20-24, 39 and 40.

[Include a specific description of the methods and methodological tiers applied in the category, describe or specify equations applied and their direct reference to the *2006 IPCC Guidelines* or other guidelines used by the country. In addition, it would be appropriate to specify the tools used for the calculation of GHGs. This information may be a repetition of the general methodological issues of the category. If this is the case, quote the relevant section]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of this category. If appropriate, include more detailed information on the methodological issues of the category in Annex V.II]

* + - 1. **Activity data of the category**

[Include a specific description of the activity data sources, assumptions used, data splicing techniques, rationale for choice of data, gaps and barriers, handling of restricted data and confidentiality, etc. If activity data sources are different for each GHG source, add a paragraph explaining each source individually]

[Include a summary table for activity data of the category by GHG source for the entire time series. Unlike emission tables, in the activity data table the years should be entered as row headers, and GHG sources as column headers (see the example below and adapt it as appropriate). Please, take into account that activity data are also included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 4-37.**

[Category]: activity data by GHG source (activity data unit)

| ***Year*** | ***GHG source 1*** | ***GHG source 2*** | ***GHG source 3*** | ***GHG source 4*** | ***GHG source 5*** | ***GHG source N*** |
| --- | --- | --- | --- | --- | --- | --- |
| 1990 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1991 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1992 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1993 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1994 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1995 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1996 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1997 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1998 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1999 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2000 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2001 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2002 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2003 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2004 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2005 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2006 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2007 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2008 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2009 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2010 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2011 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2012 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2013 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2014 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2015 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2016 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2017 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2018 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2019 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2020 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2021 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2022 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the activity data]

* + - 1. **Emission factors applied in the category**

[Include a specific description of the emission factor sources (if taken from the *2006 IPCC Guidelines*, clearly indicate the table where they appear), assumptions used, rationale for choice of data, gaps and barriers, etc. In the case of country-specific emission factors, also indicate where they were obtained, the method used for obtaining them (literature, research, specific models, expert opinion, etc.), and the consistency with default emission factors of the *2006 IPCC Guidelines*]

[Include a summary table for emission factors used by GHG source, especially country-specific emission factors (see the example below and adapt it as appropriate). Please, take into account that emission factors could also be included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 4-38.**

[Category]: emission factors applied by GHG source

| ***GHG source*** | ***GHG*** | ***Value*** | ***Unit*** |
| --- | --- | --- | --- |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the emission factors]

* + 1. **Description of any flexibility applied to the category**

MPG: provisions 4-6.

[Clearly indicate the provisions to which flexibility is applied, concisely clarify capacity constraints, noting that some constraints may be relevant to several provisions, and provide self-determined estimated time frames for improvements in relation to those capacity constraints]

[Include a table on the specific flexibility provisions applied. Please take into account that the illustrative example below is part of the **Flex\_Summary** spreadsheet of the CRT and, thus, the country may also quote it directly in this document]

**Table 4-39.**

[Category]: flexibility provisions applied

| ***MPG flexibility provision*** | ***Gas*** | ***Description of the application of flexibility*** | ***Clarification of capacity constraint*** | ***Time frame for improvement*** | ***Progress made in addressing areas of improvement*** |
| --- | --- | --- | --- | --- | --- |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |

Note:

Source: [], based on the **Flex\_Summary** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the flexibility applied]

* + 1. **Uncertainty assessment and time-series consistency of the category**

MPG: provisions 26, 27, 29 and 44. Provision 29 offers flexibility to countries that may need it.

[Include a specific description of the quantitative estimate and qualitative discussion of the uncertainty of the category by GHG and GHG source for the starting year and the latest reporting year of the time series, indicate the main uncertainty sources (activity data or emission factors), include any other relevant qualitative description]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to uncertainty. If appropriate, include more detailed information on the uncertainty analysis of the category in Annex II and quote it in this section]

[Include a specific description of how the country ensured time-series consistency for each GHG source of the category, describe gaps and barriers observed, and any data splicing technique applied. It would be appropriate to apply, at a minimum, the time-series consistency activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the time-series consistency]

* + 1. **Category-specific QA/QC and verification**

MPG: provisions 34, 35 and 46. Provisions 34 and 35 offer flexibility to countries that may need it.

[Include a specific description of quality assurance and quality control activities applied by the country for each GHG source of the category. It would be appropriate to apply, at a minimum, the QA/QC activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to QA/QC activities. If appropriate, include more details on the category QA/QC activities in Annex IV]

* + 1. **Category-specific recalculations**

MPG: provisions 28 and 43.

[Include a specific description of the recalculations, indicating the justification for recalculations or any improvement made (in response to peer reviews, methodological changes, improved activity data, etc.), and the implications or effects these recalculations had on the GHG emission trend of the category]

[Include a table on the implications or effects that the recalculations had on the GHG emission trend of the category (see illustrative example below). Please take into account that the table is adapted from the **Table8s1** spreadsheet of the CRT and, thus, the country may quote the CRT directly in this document]

**Table 4-40.**

[Category]: comparison between previous inventory and current inventory (kt CO2 eq)

| ***NGI*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Previous NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Current NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Difference | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Difference % | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% |  |  |
| **Total effect %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |
| **Total effect net %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |

Note:

Source: [], based on the **Table8s1** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the recalculations]

* + 1. **Category-specific planned improvements**

MPG: provision 7.

[Include a specific description of the activities applied, in the process of being applied, or planned to improve the quality of the category (methods, activity data, emission factors, etc.), including, in particular, monitoring of activities detected by peer review processes or other review processes or previous analyses. It would probably be appropriate to include a table to systematize improvement activities. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the improvement plan]

* 1. **Other (specify) (CRT 2.H)**

[Only if applicable]

1. **AGRICULTURE (CRT 3)**
   1. **Overview of the sector**

MPG: provisions 47, 48, 50, 51, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

* + 1. **Description of the sector**

[Include a theoretical description of the sector, its categories or GHG sources pursuant to the *2006 IPCC Guidelines* only if deemed relevant. In addition, include a practical description of the sector in the country, indicating what categories or GHG sources are present, their relevance at the national level and a completeness summary]

* + 1. **Trend in the sector's GHG**

[Include the sector's report table for the latest inventory year by categories and subcategories, and an explanation on emissions by each GHG and precursor gas in the total emissions for the sector (kt for each GHG and precursor)]

**Table 5-1.**

Agriculture sector: emissions by GHG, category and subcategory (kt) for [latest inventory year]

| ***Code*** | ***GHG source categories*** | ***CO2***  ***(kt)*** | ***CH4***  ***(kt)*** | ***N2O***  ***(kt)*** | ***NOx***  ***(kt)*** | ***CO***  ***(kt)*** | ***NMVOC*** ***(kt)*** | ***SOX***  ***(kt)*** | ***Total GHG***  ***(kt CO2 eq)*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **3.** | **Agriculture** |  |  |  |  |  |  |  |  |
| 3.A. | Enteric fermentation |  |  |  |  |  |  |  |  |
| 3.A.1. | Cattle |  |  |  |  |  |  |  |  |
| 3.A.1.a. | Dairy cattle |  |  |  |  |  |  |  |  |
| 3.A.1.b. | Non-dairy cattle |  |  |  |  |  |  |  |  |
| 3.A.2. | Sheep |  |  |  |  |  |  |  |  |
| 3.A.3. | Swine |  |  |  |  |  |  |  |  |
| 3.A.4. | Other livestock |  |  |  |  |  |  |  |  |
| 3.A.4.a. | Buffalo |  |  |  |  |  |  |  |  |
| 3.A.4.b. | Camels |  |  |  |  |  |  |  |  |
| 3.A.4.c. | Deer |  |  |  |  |  |  |  |  |
| 3.A.4.d. | Goats |  |  |  |  |  |  |  |  |
| 3.A.4.e. | Horses |  |  |  |  |  |  |  |  |
| 3.A.4.f. | Mules and asses |  |  |  |  |  |  |  |  |
| 3.A.4.g. | Poultry |  |  |  |  |  |  |  |  |
| 3.A.4.h. | Other |  |  |  |  |  |  |  |  |
| 3.B. | Manure management |  |  |  |  |  |  |  |  |
| 3.B.1. | Cattle |  |  |  |  |  |  |  |  |
| 3.B.1.a. | Dairy cattle |  |  |  |  |  |  |  |  |
| 3.B.1.b. | Non-dairy cattle |  |  |  |  |  |  |  |  |
| 3.B.2. | Sheep |  |  |  |  |  |  |  |  |
| 3.B.3. | Swine |  |  |  |  |  |  |  |  |
| 3.B.4. | Other livestock |  |  |  |  |  |  |  |  |
| 3.B.4.a. | Buffalo |  |  |  |  |  |  |  |  |
| 3.B.4.b. | Camels |  |  |  |  |  |  |  |  |
| 3.B.4.c. | Deer |  |  |  |  |  |  |  |  |
| 3.B.4.d. | Goats |  |  |  |  |  |  |  |  |
| 3.B.4.e. | Horses |  |  |  |  |  |  |  |  |
| 3.B.4.f. | Mules and asses |  |  |  |  |  |  |  |  |
| 3.B.4.g. | Poultry |  |  |  |  |  |  |  |  |
| 3.B.4.h. | Other |  |  |  |  |  |  |  |  |
| 3.B.5. | Indirect N2O |  |  |  |  |  |  |  |  |
| 3.C. | Rice cultivation |  |  |  |  |  |  |  |  |
| 3.C.1. | Irrigated |  |  |  |  |  |  |  |  |
| 3.C.2. | Rain-fed |  |  |  |  |  |  |  |  |
| 3.C.3. | Deep water |  |  |  |  |  |  |  |  |
| 3.C.4. | Other (please specify) |  |  |  |  |  |  |  |  |
| 3.D. | Agricultural soils |  |  |  |  |  |  |  |  |
| 3.D.1. | Direct N2O emissions from agricultural soils |  |  |  |  |  |  |  |  |
| 3.D.1.a. | Inorganic fertilizers |  |  |  |  |  |  |  |  |
| 3.D.1.b. | Organic fertilizers |  |  |  |  |  |  |  |  |
| 3.D.1.c. | Urine and dung deposited by grazing animals |  |  |  |  |  |  |  |  |
| 3.D.1.d. | Crop residues |  |  |  |  |  |  |  |  |
| 3.D.1.e. | Mineralization associated with soil organic matter |  |  |  |  |  |  |  |  |
| 3.D.1.f. | Cultivation of organic soils (histosols) |  |  |  |  |  |  |  |  |
| 3.D.1.g. | Other (please specify) |  |  |  |  |  |  |  |  |
| 3.D.2. | Indirect N2O emissions from agricultural soils |  |  |  |  |  |  |  |  |
| 3.D.2.a. | Atmospheric deposition |  |  |  |  |  |  |  |  |
| 3.D.2.b. | Leaching and run-off |  |  |  |  |  |  |  |  |
| 3.E. | Prescribed burning of savannahs |  |  |  |  |  |  |  |  |
| 3.F. | Field burning of agricultural residues |  |  |  |  |  |  |  |  |
| 3.F.1. | Wheat |  |  |  |  |  |  |  |  |
| 3.F.2. | Pulses |  |  |  |  |  |  |  |  |
| 3.F.3. | Tubers and roots |  |  |  |  |  |  |  |  |
| 3.F.4. | Sugar cane |  |  |  |  |  |  |  |  |
| 3.F.3. | Other (please specify) |  |  |  |  |  |  |  |  |
| 3.G. | Liming |  |  |  |  |  |  |  |  |
| 3.G.1. | Limestone |  |  |  |  |  |  |  |  |
| 3.G.2. | Dolomite |  |  |  |  |  |  |  |  |
| 3.H. | Urea application |  |  |  |  |  |  |  |  |
| 3.I. | Other carbon-containing fertilizers |  |  |  |  |  |  |  |  |
| 3.J. | Other (please specify) |  |  |  |  |  |  |  |  |

Note: Use the following notation keys where numerical data are not available: NA = not applicable; NE = not estimated; NO = not occurring; IE = included elsewhere; C = confidential.

Source: [], based on the **Table3** spreadsheet of the CRT.

[Include a description of the sector's GHGs, in kt CO2 eq, and an explanation on: (1) percentage contribution of the sector to national total emissions and national total net emissions in the latest inventory year and its percentage change over time; (2) emissions of the latest inventory year, and their key drivers; (3) percentage contribution of each category or subcategory in the latest inventory year; (4) variation between the base year and the latest inventory year, and its key drivers; (5) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (6) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total GHG emissions of the sector inventory by category or subcategory (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 5-2.**

Agriculture sector: total GHG emissions by category (kt CO2 eq)

| ***Category*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source: [], based on the **Table10s1** spreadsheet of the CRT.

[Include a summary figure of total GHG emissions of the sector inventory by category or subcategory (in kt CO2 eq), 1990-2022]

**Figure 5-1.**

Agriculture sector: total GHG emissions by category or subcategory (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the sector trend]

[Include a description of each GHG (CO2, CH4 and N2O), in kt CO2 eq, and an explanation on: (1) emissions by GHG of the latest inventory year, and their key drivers; (2) percentage contribution of each GHG in the latest inventory year; (3) variation between the base year and the latest inventory year by GHG, and its key drivers; (4) variation compared to the latest inventory year of the previous inventory by GHG, and its key drivers; and (5) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year by GHG, and its key drivers]

[Include a summary table on each GHG of the sector inventory. At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 5-3.**

Agriculture sector: emissions by GHG (kt CO2 eq)

| ***GHG*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| CO2 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| CH4 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| N2O | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of each GHG of the sector inventory (kt CO2 eq), 1990-2022]

**Figure 5-2.**

Agriculture sector: emissions by GHG (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the GHG trend in the sector inventory by GHG]

[Include a very brief description of each precursor (NOx, CO, NMVOC and SOX), and an explanation on: (1) emissions by precursor of the latest inventory year, and their key drivers; (2) percentage contribution of each precursor in the latest inventory year; (3) variation between the base year and the latest inventory year by precursor, and its key drivers; (4) variation compared to the latest inventory year of the previous inventory by precursor, and its key drivers; and (5) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year by precursor, and its key drivers]

[Include a summary table on each precursor of the sector inventory. At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 5-4.**

Agriculture sector: emissions by precursor (kt)

| ***Precursor*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| NOx | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| CO | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| NMVOC | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| SOX | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of each precursor of the sector inventory (kt), 1990-2022]

**Figure 5-3.**

Agriculture sector: emissions by precursor (kt), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the precursor trend in the sector inventory by precursor]

[If appropriate, include a very brief description of each of the other substances that have an impact on climate (for example, carbon black emissions, tropospheric ozone, particulate matter, other short-lived climate pollutants, etc.), in kt, and an explanation on: (1) emissions by other substances of the latest inventory year, and their key drivers; (2) percentage contribution of other substances in the latest inventory year; (3) variation between the base year and the latest inventory year for other substances, and its key drivers; (4) variation compared to the latest inventory year of the previous inventory for other substances, and its key drivers; and (5) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year for other substances, and its key drivers]

[Include, if appropriate, a summary table on each of the other substances that have an impact on climate of the sector inventory. At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 5-5.**

Agriculture sector: emissions of other substances that have an impact on climate (kt)

| ***Substance*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include, if appropriate, a figure summary on each of the other substances that have an impact on climate of the sector inventory (kt), 1990-2022]

**Figure 5-4.**

Agriculture sector: emissions of other substances that have an impact on climate (kt), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include, if appropriate, any conclusion or relevant aspect that the country may want to highlight pertaining to the trend in other substances that have an impact on climate of the sector inventory by substance]

* + 1. **General methodological issues of the sector**

MPG: provisions 17, 20-24, 39 and 40.

[Include a very general description of methods and methodological tiers applied, and tools used to calculate GHGs, precursor gases, and, if appropriate, other substances that have an impact on climate (for example, carbon black)]

[If a country is unable to adopt a higher tier method for a specific key category due to lack of resources, the country can use a tier 1 approach. In such cases, the country should clearly document why the methodological choice was not in line with the corresponding decision tree of the *2006 IPCC Guidelines*]

[Include a very general description of the activity data sources for the sector]

[Include a very general description of the emission factor sources. For country-specific emission factors, indicate where they were obtained and which of the subsequent sections provides more information]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of the sector. If appropriate, include more detailed information on the methodological issues of the sector in Annex V.III. In the case of other substances that have an impact on climate (for example, carbon black), include details on its methodological issues in Annex V.VI]

* 1. **Enteric fermentation (CRT 3.A)**
     1. **Description and trend of GHGs in the category**

MPG: provisions 47, 48, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

[Include a theoretical description of the category and its subcategories or GHG sources pursuant to the *2006 IPCC Guidelines* only if deemed relevant. In addition, include a practical description of the category in the country, indicating what subcategories or GHG sources are present, their relevance at the national level and a completeness summary]

[Include a description of the category's GHGs, in kt CO2 eq, and an explanation on: (1) percentage contribution of the category to the sector's total emissions in the latest inventory year and its percentage change over time; (2) emissions of the latest inventory year, and their key drivers; (3) percentage contribution of each GHG source in the latest inventory year; (4) variation between the base year and the latest inventory year, and its key drivers; (5) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (6) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total GHG emissions of the category by GHG source (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 5-6.**

[Category]: total GHG emissions by animal subcategory (kt CO2 eq)

| ***Subcategory*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of total GHG emissions of the category by GHG source (in kt CO2 eq), 1990-2022]

**Figure 5-5.**

[Category]: total GHG emissions by source (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the category or subcategory or its GHG sources]

* + 1. **Methodological issues of the category**

MPG: provisions 17, 20-24, 39 and 40.

[Include a specific description of the methods and methodological tiers applied in the category, describe or specify equations applied and their direct reference to the *2006 IPCC Guidelines* or other guidelines used by the country. In addition, it would be appropriate to specify the tools used for the calculation of GHGs. This information may be a repetition of the general methodological issues of the category. If this is the case, quote the relevant section]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of this category. If appropriate, include more detailed information on the methodological issues of the category in Annex V.III]

* + - 1. **Activity data of the category**

[Include a specific description of the activity data sources, assumptions used, data splicing techniques, rationale for choice of data, gaps and barriers, handling of restricted data and confidentiality, etc. If activity data sources are different for each GHG source, add a paragraph explaining each source individually]

[Include a summary table for activity data of the category by GHG source for the entire time series. Unlike emission tables, in the activity data table the years should be entered as row headers, and GHG sources as column headers (see the example below and adapt it as appropriate). Please, take into account that activity data are also included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 5-7.**

[Category]: activity data by GHG source (activity data unit)

| ***Year*** | ***GHG source 1*** | ***GHG source 2*** | ***GHG source 3*** | ***GHG source 4*** | ***GHG source 5*** | ***GHG source N*** |
| --- | --- | --- | --- | --- | --- | --- |
| 1990 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1991 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1992 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1993 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1994 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1995 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1996 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1997 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1998 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1999 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2000 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2001 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2002 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2003 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2004 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2005 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2006 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2007 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2008 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2009 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2010 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2011 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2012 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2013 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2014 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2015 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2016 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2017 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2018 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2019 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2020 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2021 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2022 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the activity data]

* + - 1. **Emission factors applied in the category**

[Include a specific description of the emission factor sources (if taken from the *2006 IPCC Guidelines*, clearly indicate the table where they appear), assumptions used, rationale for choice of data, gaps and barriers, etc. In the case of country-specific emission factors, also indicate where they were obtained, the method used for obtaining them (literature, research, specific models, expert opinion, etc.), and the consistency with default emission factors of the *2006 IPCC Guidelines*]

[Include a summary table for emission factors used by GHG source, especially country-specific emission factors (see the example below and adapt it as appropriate). Please, take into account that emission factors could also be included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 5-8.**

[Category]: emission factors applied by GHG source

| ***GHG source*** | ***GHG*** | ***Value*** | ***Unit*** |
| --- | --- | --- | --- |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the emission factors]

* + 1. **Description of any flexibility applied to the category**

MPG: provisions 4-6.

[Clearly indicate the provisions to which flexibility is applied, concisely clarify capacity constraints, noting that some constraints may be relevant to several provisions, and provide self-determined estimated time frames for improvements in relation to those capacity constraints]

[Include a table on the specific flexibility provisions applied. Please take into account that the illustrative example below is part of the **Flex\_Summary** spreadsheet of the CRT and, thus, the country may also quote it directly in this document]

**Table 5-9.**

[Category]: flexibility provisions applied

| ***MPG flexibility provision*** | ***Gas*** | ***Description of the application of flexibility*** | ***Clarification of capacity constraint*** | ***Time frame for improvement*** | ***Progress made in addressing areas of improvement*** |
| --- | --- | --- | --- | --- | --- |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |

Note:

Source: [], based on the **Flex\_Summary** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the flexibility applied]

* + 1. **Uncertainty assessment and time-series consistency of the category**

MPG: provisions 26, 27, 29 and 44. Provision 29 offers flexibility to countries that may need it.

[Include a specific description of the quantitative estimate and qualitative discussion of the uncertainty of the category by GHG and GHG source for the starting year and the latest reporting year of the time series, indicate the main uncertainty sources (activity data or emission factors), include any other relevant qualitative description]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to uncertainty. If appropriate, include more detailed information on the uncertainty analysis of the category in Annex II and quote it in this section]

[Include a specific description of how the country ensured time-series consistency for each GHG source of the category, describe gaps and barriers observed, and any data splicing technique applied. It would be appropriate to apply, at a minimum, the time-series consistency activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the time-series consistency]

* + 1. **Category-specific QA/QC and verification**

MPG: provisions 34, 35 and 46. Provisions 34 and 35 offer flexibility to countries that may need it.

[Include a specific description of quality assurance and quality control activities applied by the country for each GHG source of the category. It would be appropriate to apply, at a minimum, the QA/QC activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to QA/QC activities. If appropriate, include more details on the category QA/QC activities in Annex IV]

* + 1. **Category-specific recalculations**

MPG: provisions 28 and 43.

[Include a specific description of the recalculations, indicating the justification for recalculations or any improvement made (in response to peer reviews, methodological changes, improved activity data, etc.), and the implications or effects these recalculations had on the GHG emission trend of the category]

[Include a table on the implications or effects that the recalculations had on the GHG emission trend of the category (see illustrative example below). Please take into account that the table is adapted from the **Table8s1** spreadsheet of the CRT and, thus, the country may quote the CRT directly in this document]

**Table 5-10.**

[Category]: comparison between previous inventory and current inventory (kt CO2 eq)

| ***NGI*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Previous NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Current NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Difference | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Difference % | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% |  |  |
| **Total effect %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |
| **Total effect net %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |

Note:

Source: [], based on the **Table8s1** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the recalculations]

* + 1. **Category-specific planned improvements**

MPG: provision 7.

[Include a specific description of the activities applied, in the process of being applied, or planned to improve the quality of the category (methods, activity data, emission factors, etc.), including, in particular, monitoring of activities detected by peer review processes or other review processes or previous analyses. It would probably be appropriate to include a table to systematize improvement activities. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the improvement plan]

* 1. **Manure management (CRT 3.B)**
     1. **Description and trend of GHGs in the category**

MPG: provisions 47, 48, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

[Include a theoretical description of the category and its subcategories or GHG sources pursuant to the *2006 IPCC Guidelines* only if deemed relevant. In addition, include a practical description of the category in the country, indicating what subcategories or GHG sources are present, their relevance at the national level and a completeness summary]

[Include a description of the category's GHGs, in kt CO2 eq, and an explanation on: (1) percentage contribution of the category to the sector's total emissions in the latest inventory year and its percentage change over time; (2) emissions of the latest inventory year, and their key drivers; (3) percentage contribution of each GHG source in the latest inventory year; (4) variation between the base year and the latest inventory year, and its key drivers; (5) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (6) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total GHG emissions of the category by GHG source (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 5-11.**

[Category]: total GHG emissions by animal subcategory (kt CO2 eq)

| ***Subcategory*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of total GHG emissions of the category by GHG source (in kt CO2 eq), 1990-2022]

**Figure 5-6.**

[Category]: total GHG emissions by source (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the category or subcategory or its GHG sources]

* + 1. **Methodological issues of the category**

MPG: provisions 17, 20-24, 39 and 40.

[Include a specific description of the methods and methodological tiers applied in the category, describe or specify equations applied and their direct reference to the *2006 IPCC Guidelines* or other guidelines used by the country. In addition, it would be appropriate to specify the tools used for the calculation of GHGs. This information may be a repetition of the general methodological issues of the category. If this is the case, quote the relevant section]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of this category. If appropriate, include more detailed information on the methodological issues of the category in Annex V.III]

* + - 1. **Activity data of the category**

[Include a specific description of the activity data sources, assumptions used, data splicing techniques, rationale for choice of data, gaps and barriers, handling of restricted data and confidentiality, etc. If activity data sources are different for each GHG source, add a paragraph explaining each source individually]

[Include a summary table for activity data of the category by GHG source for the entire time series. Unlike emission tables, in the activity data table the years should be entered as row headers, and GHG sources as column headers (see the example below and adapt it as appropriate). Please, take into account that activity data are also included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 5-12.**

[Category]: activity data by GHG source (activity data unit)

| ***Year*** | ***GHG source 1*** | ***GHG source 2*** | ***GHG source 3*** | ***GHG source 4*** | ***GHG source 5*** | ***GHG source N*** |
| --- | --- | --- | --- | --- | --- | --- |
| 1990 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1991 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1992 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1993 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1994 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1995 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1996 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1997 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1998 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1999 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2000 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2001 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2002 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2003 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2004 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2005 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2006 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2007 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2008 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2009 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2010 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2011 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2012 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2013 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2014 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2015 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2016 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2017 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2018 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2019 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2020 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2021 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2022 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the activity data]

* + - 1. **Emission factors applied in the category**

[Include a specific description of the emission factor sources (if taken from the *2006 IPCC Guidelines*, clearly indicate the table where they appear), assumptions used, rationale for choice of data, gaps and barriers, etc. In the case of country-specific emission factors, also indicate where they were obtained, the method used for obtaining them (literature, research, specific models, expert opinion, etc.), and the consistency with default emission factors of the *2006 IPCC Guidelines*]

[Include a summary table for emission factors used by GHG source, especially country-specific emission factors (see the example below and adapt it as appropriate). Please, take into account that emission factors could also be included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 5-13.**

[Category]: emission factors applied by GHG source

| ***GHG source*** | ***GHG*** | ***Value*** | ***Unit*** |
| --- | --- | --- | --- |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the emission factors]

* + 1. **Description of any flexibility applied to the category**

MPG: provisions 4-6.

[Clearly indicate the provisions to which flexibility is applied, concisely clarify capacity constraints, noting that some constraints may be relevant to several provisions, and provide self-determined estimated time frames for improvements in relation to those capacity constraints]

[Include a table on the specific flexibility provisions applied. Please take into account that the illustrative example below is part of the **Flex\_Summary** spreadsheet of the CRT and, thus, the country may also quote it directly in this document]

**Table 5-14.**

[Category]: flexibility provisions applied

| ***MPG flexibility provision*** | ***Gas*** | ***Description of the application of flexibility*** | ***Clarification of capacity constraint*** | ***Time frame for improvement*** | ***Progress made in addressing areas of improvement*** |
| --- | --- | --- | --- | --- | --- |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |

Note:

Source: [], based on the **Flex\_Summary** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the flexibility applied]

* + 1. **Uncertainty assessment and time-series consistency of the category**

MPG: provisions 26, 27, 29 and 44. Provision 29 offers flexibility to countries that may need it.

[Include a specific description of the quantitative estimate and qualitative discussion of the uncertainty of the category by GHG and GHG source for the starting year and the latest reporting year of the time series, indicate the main uncertainty sources (activity data or emission factors), include any other relevant qualitative description]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to uncertainty. If appropriate, include more detailed information on the uncertainty analysis of the category in Annex II and quote it in this section]

[Include a specific description of how the country ensured time-series consistency for each GHG source of the category, describe gaps and barriers observed, and any data splicing technique applied. It would be appropriate to apply, at a minimum, the time-series consistency activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the time-series consistency]

* + 1. **Category-specific QA/QC and verification**

MPG: provisions 34, 35 and 46. Provisions 34 and 35 offer flexibility to countries that may need it.

[Include a specific description of quality assurance and quality control activities applied by the country for each GHG source of the category. It would be appropriate to apply, at a minimum, the QA/QC activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to QA/QC activities. If appropriate, include more details on the category QA/QC activities in Annex IV]

* + 1. **Category-specific recalculations**

MPG: provisions 28 and 43.

[Include a specific description of the recalculations, indicating the justification for recalculations or any improvement made (in response to peer reviews, methodological changes, improved activity data, etc.), and the implications or effects these recalculations had on the GHG emission trend of the category]

[Include a table on the implications or effects that the recalculations had on the GHG emission trend of the category (see illustrative example below). Please take into account that the table is adapted from the **Table8s1** spreadsheet of the CRT and, thus, the country may quote the CRT directly in this document]

**Table 5-15.**

[Category]: comparison between previous inventory and current inventory (kt CO2 eq)

| ***NGI*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Previous NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Current NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Difference | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Difference % | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% |  |  |
| **Total effect %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |
| **Total effect net %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |

Note:

Source: [], based on the **Table8s1** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the recalculations]

* + 1. **Category-specific planned improvements**

MPG: provision 7.

[Include a specific description of the activities applied, in the process of being applied, or planned to improve the quality of the category (methods, activity data, emission factors, etc.), including, in particular, monitoring of activities detected by peer review processes or other review processes or previous analyses. It would probably be appropriate to include a table to systematize improvement activities. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the improvement plan]

* 1. **Rice cultivation (CRT 3.C)**
     1. **Description and trend of GHGs in the category**

MPG: provisions 47, 48, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

[Include a theoretical description of the category and its subcategories or GHG sources pursuant to the *2006 IPCC Guidelines* only if deemed relevant. In addition, include a practical description of the category in the country, indicating what subcategories or GHG sources are present, their relevance at the national level and a completeness summary]

[Include a description of the category's GHGs, in kt CO2 eq, and an explanation on: (1) percentage contribution of the category to the sector's total emissions in the latest inventory year and its percentage change over time; (2) emissions of the latest inventory year, and their key drivers; (3) percentage contribution of each GHG source in the latest inventory year; (4) variation between the base year and the latest inventory year, and its key drivers; (5) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (6) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total GHG emissions of the category by GHG source (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 5-16.**

[Category]: total GHG emissions by subcategory (kt CO2 eq)

| ***Subcategory*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of total GHG emissions of the category by GHG source (in kt CO2 eq), 1990-2022]

**Figure 5-7.**

[Category]: total GHG emissions by source (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the category or subcategory or its GHG sources]

* + 1. **Methodological issues of the category**

MPG: provisions 17, 20-24, 39 and 40.

[Include a specific description of the methods and methodological tiers applied in the category, describe or specify equations applied and their direct reference to the *2006 IPCC Guidelines* or other guidelines used by the country. In addition, it would be appropriate to specify the tools used for the calculation of GHGs. This information may be a repetition of the general methodological issues of the category. If this is the case, quote the relevant section]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of this category. If appropriate, include more detailed information on the methodological issues of the category in Annex V.III]

* + - 1. **Activity data of the category**

[Include a specific description of the activity data sources, assumptions used, data splicing techniques, rationale for choice of data, gaps and barriers, handling of restricted data and confidentiality, etc. If activity data sources are different for each GHG source, add a paragraph explaining each source individually]

[Include a summary table for activity data of the category by GHG source for the entire time series. Unlike emission tables, in the activity data table the years should be entered as row headers, and GHG sources as column headers (see the example below and adapt it as appropriate). Please, take into account that activity data are also included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 5-17.**

[Category]: activity data by GHG source (activity data unit)

| ***Year*** | ***GHG source 1*** | ***GHG source 2*** | ***GHG source 3*** | ***GHG source 4*** | ***GHG source 5*** | ***GHG source N*** |
| --- | --- | --- | --- | --- | --- | --- |
| 1990 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1991 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1992 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1993 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1994 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1995 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1996 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1997 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1998 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1999 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2000 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2001 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2002 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2003 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2004 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2005 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2006 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2007 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2008 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2009 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2010 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2011 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2012 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2013 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2014 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2015 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2016 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2017 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2018 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2019 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2020 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2021 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2022 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the activity data]

* + - 1. **Emission factors applied in the category**

[Include a specific description of the emission factor sources (if taken from the *2006 IPCC Guidelines*, clearly indicate the table where they appear), assumptions used, rationale for choice of data, gaps and barriers, etc. In the case of country-specific emission factors, also indicate where they were obtained, the method used for obtaining them (literature, research, specific models, expert opinion, etc.), and the consistency with default emission factors of the *2006 IPCC Guidelines*]

[Include a summary table for emission factors used by GHG source, especially country-specific emission factors (see the example below and adapt it as appropriate). Please, take into account that emission factors could also be included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 5-18.**

[Category]: emission factors applied by GHG source

| ***GHG source*** | ***GHG*** | ***Value*** | ***Unit*** |
| --- | --- | --- | --- |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the emission factors]

* + 1. **Description of any flexibility applied to the category**

MPG: provisions 4-6.

[Clearly indicate the provisions to which flexibility is applied, concisely clarify capacity constraints, noting that some constraints may be relevant to several provisions, and provide self-determined estimated time frames for improvements in relation to those capacity constraints]

[Include a table on the specific flexibility provisions applied. Please take into account that the illustrative example below is part of the **Flex\_Summary** spreadsheet of the CRT and, thus, the country may also quote it directly in this document]

**Table 5-19.**

[Category]: flexibility provisions applied

| ***MPG flexibility provision*** | ***Gas*** | ***Description of the application of flexibility*** | ***Clarification of capacity constraint*** | ***Time frame for improvement*** | ***Progress made in addressing areas of improvement*** |
| --- | --- | --- | --- | --- | --- |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |

Note:

Source: [], based on the **Flex\_Summary** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the flexibility applied]

* + 1. **Uncertainty assessment and time-series consistency of the category**

MPG: provisions 26, 27, 29 and 44. Provision 29 offers flexibility to countries that may need it.

[Include a specific description of the quantitative estimate and qualitative discussion of the uncertainty of the category by GHG and GHG source for the starting year and the latest reporting year of the time series, indicate the main uncertainty sources (activity data or emission factors), include any other relevant qualitative description]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to uncertainty. If appropriate, include more detailed information on the uncertainty analysis of the category in Annex II and quote it in this section]

[Include a specific description of how the country ensured time-series consistency for each GHG source of the category, describe gaps and barriers observed, and any data splicing technique applied. It would be appropriate to apply, at a minimum, the time-series consistency activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the time-series consistency]

* + 1. **Category-specific QA/QC and verification**

MPG: provisions 34, 35 and 46. Provisions 34 and 35 offer flexibility to countries that may need it.

[Include a specific description of quality assurance and quality control activities applied by the country for each GHG source of the category. It would be appropriate to apply, at a minimum, the QA/QC activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to QA/QC activities. If appropriate, include more details on the category QA/QC activities in Annex IV]

* + 1. **Category-specific recalculations**

MPG: provisions 28 and 43.

[Include a specific description of the recalculations, indicating the justification for recalculations or any improvement made (in response to peer reviews, methodological changes, improved activity data, etc.), and the implications or effects these recalculations had on the GHG emission trend of the category]

[Include a table on the implications or effects that the recalculations had on the GHG emission trend of the category (see illustrative example below). Please take into account that the table is adapted from the **Table8s1** spreadsheet of the CRT and, thus, the country may quote the CRT directly in this document]

**Table 5-20.**

[Category]: comparison between previous inventory and current inventory (kt CO2 eq)

| ***NGI*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Previous NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Current NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Difference | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Difference % | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% |  |  |
| **Total effect %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |
| **Total effect net %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |

Note:

Source: [], based on the **Table8s1** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the recalculations]

* + 1. **Category-specific planned improvements**

MPG: provision 7.

[Include a specific description of the activities applied, in the process of being applied, or planned to improve the quality of the category (methods, activity data, emission factors, etc.), including, in particular, monitoring of activities detected by peer review processes or other review processes or previous analyses. It would probably be appropriate to include a table to systematize improvement activities. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the improvement plan]

* 1. **Agricultural soils (CRT 3.D)**
     1. **Description and trend of GHGs in the category**

MPG: provisions 47, 48, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

[Include a theoretical description of the category and its subcategories or GHG sources pursuant to the *2006 IPCC Guidelines* only if deemed relevant. In addition, include a practical description of the category in the country, indicating what subcategories or GHG sources are present, their relevance at the national level and a completeness summary]

[Include a description of the category's GHGs, in kt CO2 eq, and an explanation on: (1) percentage contribution of the category to the sector's total emissions in the latest inventory year and its percentage change over time; (2) emissions of the latest inventory year, and their key drivers; (3) percentage contribution of each GHG source in the latest inventory year; (4) variation between the base year and the latest inventory year, and its key drivers; (5) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (6) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total GHG emissions of the category by GHG source (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 5-21.**

[Category]: total GHG emissions by subcategory (kt CO2 eq)

| ***Subcategory*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of total GHG emissions of the category by GHG source (in kt CO2 eq), 1990-2022]

**Figure 5-8.**

[Category]: total GHG emissions by source (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the category or subcategory or its GHG sources]

* + 1. **Methodological issues of the category**

MPG: provisions 17, 20-24, 39 and 40.

[Include a specific description of the methods and methodological tiers applied in the category, describe or specify equations applied and their direct reference to the *2006 IPCC Guidelines* or other guidelines used by the country. In addition, it would be appropriate to specify the tools used for the calculation of GHGs. This information may be a repetition of the general methodological issues of the category. If this is the case, quote the relevant section]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of this category. If appropriate, include more detailed information on the methodological issues of the category in Annex V.III]

* + - 1. **Activity data of the category**

[Include a specific description of the activity data sources, assumptions used, data splicing techniques, rationale for choice of data, gaps and barriers, handling of restricted data and confidentiality, etc. If activity data sources are different for each GHG source, add a paragraph explaining each source individually]

[Include a summary table for activity data of the category by GHG source for the entire time series. Unlike emission tables, in the activity data table the years should be entered as row headers, and GHG sources as column headers (see the example below and adapt it as appropriate). Please, take into account that activity data are also included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 5-22.**

[Category]: activity data by GHG source (activity data unit)

| ***Year*** | ***GHG source 1*** | ***GHG source 2*** | ***GHG source 3*** | ***GHG source 4*** | ***GHG source 5*** | ***GHG source N*** |
| --- | --- | --- | --- | --- | --- | --- |
| 1990 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1991 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1992 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1993 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1994 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1995 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1996 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1997 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1998 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1999 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2000 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2001 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2002 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2003 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2004 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2005 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2006 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2007 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2008 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2009 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2010 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2011 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2012 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2013 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2014 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2015 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2016 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2017 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2018 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2019 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2020 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2021 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2022 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the activity data]

* + - 1. **Emission factors applied in the category**

[Include a specific description of the emission factor sources (if taken from the *2006 IPCC Guidelines*, clearly indicate the table where they appear), assumptions used, rationale for choice of data, gaps and barriers, etc. In the case of country-specific emission factors, also indicate where they were obtained, the method used for obtaining them (literature, research, specific models, expert opinion, etc.), and the consistency with default emission factors of the *2006 IPCC Guidelines*]

[Include a summary table for emission factors used by GHG source, especially country-specific emission factors (see the example below and adapt it as appropriate). Please, take into account that emission factors could also be included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 5-23.**

[Category]: emission factors applied by GHG source

| ***GHG source*** | ***GHG*** | ***Value*** | ***Unit*** |
| --- | --- | --- | --- |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the emission factors]

* + 1. **Description of any flexibility applied to the category**

MPG: provisions 4-6.

[Clearly indicate the provisions to which flexibility is applied, concisely clarify capacity constraints, noting that some constraints may be relevant to several provisions, and provide self-determined estimated time frames for improvements in relation to those capacity constraints]

[Include a table on the specific flexibility provisions applied. Please take into account that the illustrative example below is part of the **Flex\_Summary** spreadsheet of the CRT and, thus, the country may also quote it directly in this document]

**Table 5-24.**

[Category]: flexibility provisions applied

| ***MPG flexibility provision*** | ***Gas*** | ***Description of the application of flexibility*** | ***Clarification of capacity constraint*** | ***Time frame for improvement*** | ***Progress made in addressing areas of improvement*** |
| --- | --- | --- | --- | --- | --- |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |

Note:

Source: [], based on the **Flex\_Summary** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the flexibility applied]

* + 1. **Uncertainty assessment and time-series consistency of the category**

MPG: provisions 26, 27, 29 and 44. Provision 29 offers flexibility to countries that may need it.

[Include a specific description of the quantitative estimate and qualitative discussion of the uncertainty of the category by GHG and GHG source for the starting year and the latest reporting year of the time series, indicate the main uncertainty sources (activity data or emission factors), include any other relevant qualitative description]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to uncertainty. If appropriate, include more detailed information on the uncertainty analysis of the category in Annex II and quote it in this section]

[Include a specific description of how the country ensured time-series consistency for each GHG source of the category, describe gaps and barriers observed, and any data splicing technique applied. It would be appropriate to apply, at a minimum, the time-series consistency activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the time-series consistency]

* + 1. **Category-specific QA/QC and verification**

MPG: provisions 34, 35 and 46. Provisions 34 and 35 offer flexibility to countries that may need it.

[Include a specific description of quality assurance and quality control activities applied by the country for each GHG source of the category. It would be appropriate to apply, at a minimum, the QA/QC activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to QA/QC activities. If appropriate, include more details on the category QA/QC activities in Annex IV]

* + 1. **Category-specific recalculations**

MPG: provisions 28 and 43.

[Include a specific description of the recalculations, indicating the justification for recalculations or any improvement made (in response to peer reviews, methodological changes, improved activity data, etc.), and the implications or effects these recalculations had on the GHG emission trend of the category]

[Include a table on the implications or effects that the recalculations had on the GHG emission trend of the category (see illustrative example below). Please take into account that the table is adapted from the **Table8s1** spreadsheet of the CRT and, thus, the country may quote the CRT directly in this document]

**Table 5-25.**

[Category]: comparison between previous inventory and current inventory (kt CO2 eq)

| ***NGI*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Previous NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Current NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Difference | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Difference % | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% |  |  |
| **Total effect %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |
| **Total effect net %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |

Note:

Source: [], based on the **Table8s1** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the recalculations]

* + 1. **Category-specific planned improvements**

MPG: provision 7.

[Include a specific description of the activities applied, in the process of being applied, or planned to improve the quality of the category (methods, activity data, emission factors, etc.), including, in particular, monitoring of activities detected by peer review processes or other review processes or previous analyses. It would probably be appropriate to include a table to systematize improvement activities. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the improvement plan]

* 1. **Prescribed burning of savannahs (CRT 3.E)**
     1. **Description and trend of GHGs in the category**

MPG: provisions 47, 48, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

[Include a theoretical description of the category and its subcategories or GHG sources pursuant to the *2006 IPCC Guidelines* only if deemed relevant. In addition, include a practical description of the category in the country, indicating what subcategories or GHG sources are present, their relevance at the national level and a completeness summary]

[Include a description of the category's GHGs, in kt CO2 eq, and an explanation on: (1) percentage contribution of the category to the sector's total emissions in the latest inventory year and its percentage change over time; (2) emissions of the latest inventory year, and their key drivers; (3) percentage contribution of each GHG source in the latest inventory year; (4) variation between the base year and the latest inventory year, and its key drivers; (5) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (6) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total GHG emissions of the category by GHG source (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 5-26.**

[Category]: total GHG emissions by subcategory (kt CO2 eq)

| ***Subcategory*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of total GHG emissions of the category by GHG source (in kt CO2 eq), 1990-2022]

**Figure 5-9.**

[Category]: total GHG emissions by source (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the category or subcategory or its GHG sources]

* + 1. **Methodological issues of the category**

MPG: provisions 17, 20-24, 39 and 40.

[Include a specific description of the methods and methodological tiers applied in the category, describe or specify equations applied and their direct reference to the *2006 IPCC Guidelines* or other guidelines used by the country. In addition, it would be appropriate to specify the tools used for the calculation of GHGs. This information may be a repetition of the general methodological issues of the category. If this is the case, quote the relevant section]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of this category. If appropriate, include more detailed information on the methodological issues of the category in Annex V.III]

* + - 1. **Activity data of the category**

[Include a specific description of the activity data sources, assumptions used, data splicing techniques, rationale for choice of data, gaps and barriers, handling of restricted data and confidentiality, etc. If activity data sources are different for each GHG source, add a paragraph explaining each source individually]

[Include a summary table for activity data of the category by GHG source for the entire time series. Unlike emission tables, in the activity data table the years should be entered as row headers, and GHG sources as column headers (see the example below and adapt it as appropriate). Please, take into account that activity data are also included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 5-27.**

[Category]: activity data by GHG source (activity data unit)

| ***Year*** | ***GHG source 1*** | ***GHG source 2*** | ***GHG source 3*** | ***GHG source 4*** | ***GHG source 5*** | ***GHG source N*** |
| --- | --- | --- | --- | --- | --- | --- |
| 1990 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1991 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1992 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1993 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1994 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1995 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1996 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1997 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1998 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1999 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2000 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2001 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2002 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2003 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2004 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2005 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2006 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2007 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2008 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2009 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2010 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2011 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2012 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2013 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2014 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2015 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2016 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2017 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2018 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2019 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2020 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2021 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2022 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the activity data]

* + - 1. **Emission factors applied in the category**

[Include a specific description of the emission factor sources (if taken from the *2006 IPCC Guidelines*, clearly indicate the table where they appear), assumptions used, rationale for choice of data, gaps and barriers, etc. In the case of country-specific emission factors, also indicate where they were obtained, the method used for obtaining them (literature, research, specific models, expert opinion, etc.), and the consistency with default emission factors of the *2006 IPCC Guidelines*]

[Include a summary table for emission factors used by GHG source, especially country-specific emission factors (see the example below and adapt it as appropriate). Please, take into account that emission factors could also be included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 5-28.**

[Category]: emission factors applied by GHG source

| ***GHG source*** | ***GHG*** | ***Value*** | ***Unit*** |
| --- | --- | --- | --- |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the emission factors]

* + 1. **Description of any flexibility applied to the category**

MPG: provisions 4-6.

[Clearly indicate the provisions to which flexibility is applied, concisely clarify capacity constraints, noting that some constraints may be relevant to several provisions, and provide self-determined estimated time frames for improvements in relation to those capacity constraints]

[Include a table on the specific flexibility provisions applied. Please take into account that the illustrative example below is part of the **Flex\_Summary** spreadsheet of the CRT and, thus, the country may also quote it directly in this document]

**Table 5-29.**

[Category]: flexibility provisions applied

| ***MPG flexibility provision*** | ***Gas*** | ***Description of the application of flexibility*** | ***Clarification of capacity constraint*** | ***Time frame for improvement*** | ***Progress made in addressing areas of improvement*** |
| --- | --- | --- | --- | --- | --- |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |

Note:

Source: [], based on the **Flex\_Summary** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the flexibility applied]

* + 1. **Uncertainty assessment and time-series consistency of the category**

MPG: provisions 26, 27, 29 and 44. Provision 29 offers flexibility to countries that may need it.

[Include a specific description of the quantitative estimate and qualitative discussion of the uncertainty of the category by GHG and GHG source for the starting year and the latest reporting year of the time series, indicate the main uncertainty sources (activity data or emission factors), include any other relevant qualitative description]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to uncertainty. If appropriate, include more detailed information on the uncertainty analysis of the category in Annex II and quote it in this section]

[Include a specific description of how the country ensured time-series consistency for each GHG source of the category, describe gaps and barriers observed, and any data splicing technique applied. It would be appropriate to apply, at a minimum, the time-series consistency activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the time-series consistency]

* + 1. **Category-specific QA/QC and verification**

MPG: provisions 34, 35 and 46. Provisions 34 and 35 offer flexibility to countries that may need it.

[Include a specific description of quality assurance and quality control activities applied by the country for each GHG source of the category. It would be appropriate to apply, at a minimum, the QA/QC activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to QA/QC activities. If appropriate, include more details on the category QA/QC activities in Annex IV]

* + 1. **Category-specific recalculations**

MPG: provisions 28 and 43.

[Include a specific description of the recalculations, indicating the justification for recalculations or any improvement made (in response to peer reviews, methodological changes, improved activity data, etc.), and the implications or effects these recalculations had on the GHG emission trend of the category]

[Include a table on the implications or effects that the recalculations had on the GHG emission trend of the category (see illustrative example below). Please take into account that the table is adapted from the **Table8s1** spreadsheet of the CRT and, thus, the country may quote the CRT directly in this document]

**Table 5-30.**

[Category]: comparison between previous inventory and current inventory (kt CO2 eq)

| ***NGI*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Previous NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Current NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Difference | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Difference % | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% |  |  |
| **Total effect %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |
| **Total effect net %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |

Note:

Source: [], based on the **Table8s1** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the recalculations]

* + 1. **Category-specific planned improvements**

MPG: provision 7.

[Include a specific description of the activities applied, in the process of being applied, or planned to improve the quality of the category (methods, activity data, emission factors, etc.), including, in particular, monitoring of activities detected by peer review processes or other review processes or previous analyses. It would probably be appropriate to include a table to systematize improvement activities. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the improvement plan]

* 1. **Field burning of agricultural residues (CRT 3.F)**
     1. **Description and trend of GHGs in the category**

MPG: provisions 47, 48, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

[Include a theoretical description of the category and its subcategories or GHG sources pursuant to the *2006 IPCC Guidelines* only if deemed relevant. In addition, include a practical description of the category in the country, indicating what subcategories or GHG sources are present, their relevance at the national level and a completeness summary]

[Include a description of the category's GHGs, in kt CO2 eq, and an explanation on: (1) percentage contribution of the category to the sector's total emissions in the latest inventory year and its percentage change over time; (2) emissions of the latest inventory year, and their key drivers; (3) percentage contribution of each GHG source in the latest inventory year; (4) variation between the base year and the latest inventory year, and its key drivers; (5) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (6) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total GHG emissions of the category by GHG source (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 5-31.**

[Category]: total GHG emissions by subcategory (kt CO2 eq)

| ***Subcategory*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of total GHG emissions of the category by GHG source (in kt CO2 eq), 1990-2022]

**Figure 5-10.**

[Category]: total GHG emissions by source (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the category or subcategory or its GHG sources]

* + 1. **Methodological issues of the category**

MPG: provisions 17, 20-24, 39 and 40.

[Include a specific description of the methods and methodological tiers applied in the category, describe or specify equations applied and their direct reference to the *2006 IPCC Guidelines* or other guidelines used by the country. In addition, it would be appropriate to specify the tools used for the calculation of GHGs. This information may be a repetition of the general methodological issues of the category. If this is the case, quote the relevant section]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of this category. If appropriate, include more detailed information on the methodological issues of the category in Annex V.III]

* + - 1. **Activity data of the category**

[Include a specific description of the activity data sources, assumptions used, data splicing techniques, rationale for choice of data, gaps and barriers, handling of restricted data and confidentiality, etc. If activity data sources are different for each GHG source, add a paragraph explaining each source individually]

[Include a summary table for activity data of the category by GHG source for the entire time series. Unlike emission tables, in the activity data table the years should be entered as row headers, and GHG sources as column headers (see the example below and adapt it as appropriate). Please, take into account that activity data are also included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 5-32.**

[Category]: activity data by GHG source (activity data unit)

| ***Year*** | ***GHG source 1*** | ***GHG source 2*** | ***GHG source 3*** | ***GHG source 4*** | ***GHG source 5*** | ***GHG source N*** |
| --- | --- | --- | --- | --- | --- | --- |
| 1990 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1991 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1992 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1993 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1994 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1995 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1996 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1997 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1998 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1999 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2000 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2001 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2002 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2003 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2004 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2005 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2006 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2007 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2008 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2009 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2010 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2011 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2012 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2013 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2014 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2015 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2016 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2017 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2018 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2019 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2020 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2021 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2022 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the activity data]

* + - 1. **Emission factors applied in the category**

[Include a specific description of the emission factor sources (if taken from the *2006 IPCC Guidelines*, clearly indicate the table where they appear), assumptions used, rationale for choice of data, gaps and barriers, etc. In the case of country-specific emission factors, also indicate where they were obtained, the method used for obtaining them (literature, research, specific models, expert opinion, etc.), and the consistency with default emission factors of the *2006 IPCC Guidelines*]

[Include a summary table for emission factors used by GHG source, especially country-specific emission factors (see the example below and adapt it as appropriate). Please, take into account that emission factors could also be included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 5-33.**

[Category]: emission factors applied by GHG source

| ***GHG source*** | ***GHG*** | ***Value*** | ***Unit*** |
| --- | --- | --- | --- |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the emission factors]

* + 1. **Description of any flexibility applied to the category**

MPG: provisions 4-6.

[Clearly indicate the provisions to which flexibility is applied, concisely clarify capacity constraints, noting that some constraints may be relevant to several provisions, and provide self-determined estimated time frames for improvements in relation to those capacity constraints]

[Include a table on the specific flexibility provisions applied. Please take into account that the illustrative example below is part of the **Flex\_Summary** spreadsheet of the CRT and, thus, the country may also quote it directly in this document]

**Table 5-34.**

[Category]: flexibility provisions applied

| ***MPG flexibility provision*** | ***Gas*** | ***Description of the application of flexibility*** | ***Clarification of capacity constraint*** | ***Time frame for improvement*** | ***Progress made in addressing areas of improvement*** |
| --- | --- | --- | --- | --- | --- |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |

Note:

Source: [], based on the **Flex\_Summary** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the flexibility applied]

* + 1. **Uncertainty assessment and time-series consistency of the category**

MPG: provisions 26, 27, 29 and 44. Provision 29 offers flexibility to countries that may need it.

[Include a specific description of the quantitative estimate and qualitative discussion of the uncertainty of the category by GHG and GHG source for the starting year and the latest reporting year of the time series, indicate the main uncertainty sources (activity data or emission factors), include any other relevant qualitative description]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to uncertainty. If appropriate, include more detailed information on the uncertainty analysis of the category in Annex II and quote it in this section]

[Include a specific description of how the country ensured time-series consistency for each GHG source of the category, describe gaps and barriers observed, and any data splicing technique applied. It would be appropriate to apply, at a minimum, the time-series consistency activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the time-series consistency]

* + 1. **Category-specific QA/QC and verification**

MPG: provisions 34, 35 and 46. Provisions 34 and 35 offer flexibility to countries that may need it.

[Include a specific description of quality assurance and quality control activities applied by the country for each GHG source of the category. It would be appropriate to apply, at a minimum, the QA/QC activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to QA/QC activities. If appropriate, include more details on the category QA/QC activities in Annex IV]

* + 1. **Category-specific recalculations**

MPG: provisions 28 and 43.

[Include a specific description of the recalculations, indicating the justification for recalculations or any improvement made (in response to peer reviews, methodological changes, improved activity data, etc.), and the implications or effects these recalculations had on the GHG emission trend of the category]

[Include a table on the implications or effects that the recalculations had on the GHG emission trend of the category (see illustrative example below). Please take into account that the table is adapted from the **Table8s1** spreadsheet of the CRT and, thus, the country may quote the CRT directly in this document]

**Table 5-35.**

[Category]: comparison between previous inventory and current inventory (kt CO2 eq)

| ***NGI*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Previous NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Current NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Difference | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Difference % | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% |  |  |
| **Total effect %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |
| **Total effect net %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |

Note:

Source: [], based on the **Table8s1** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the recalculations]

* + 1. **Category-specific planned improvements**

MPG: provision 7.

[Include a specific description of the activities applied, in the process of being applied, or planned to improve the quality of the category (methods, activity data, emission factors, etc.), including, in particular, monitoring of activities detected by peer review processes or other review processes or previous analyses. It would probably be appropriate to include a table to systematize improvement activities. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the improvement plan]

* 1. **Liming (CRT 3.G)**
     1. **Description and trend of GHGs in the category**

MPG: provisions 47, 48, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

[Include a theoretical description of the category and its subcategories or GHG sources pursuant to the *2006 IPCC Guidelines* only if deemed relevant. In addition, include a practical description of the category in the country, indicating what subcategories or GHG sources are present, their relevance at the national level and a completeness summary]

[Include a description of the category's GHGs, in kt CO2 eq, and an explanation on: (1) percentage contribution of the category to the sector's total emissions in the latest inventory year and its percentage change over time; (2) emissions of the latest inventory year, and their key drivers; (3) percentage contribution of each GHG source in the latest inventory year; (4) variation between the base year and the latest inventory year, and its key drivers; (5) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (6) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total GHG emissions of the category by GHG source (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 5-36.**

[Category]: total GHG emissions by subcategory (kt CO2 eq)

| ***Subcategory*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of total GHG emissions of the category by GHG source (in kt CO2 eq), 1990-2022]

**Figure 5-11.**

[Category]: total GHG emissions by source (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the category or subcategory or its GHG sources]

* + 1. **Methodological issues of the category**

MPG: provisions 17, 20-24, 39 and 40.

[Include a specific description of the methods and methodological tiers applied in the category, describe or specify equations applied and their direct reference to the *2006 IPCC Guidelines* or other guidelines used by the country. In addition, it would be appropriate to specify the tools used for the calculation of GHGs. This information may be a repetition of the general methodological issues of the category. If this is the case, quote the relevant section]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of this category. If appropriate, include more detailed information on the methodological issues of the category in Annex V.III]

* + - 1. **Activity data of the category**

[Include a specific description of the activity data sources, assumptions used, data splicing techniques, rationale for choice of data, gaps and barriers, handling of restricted data and confidentiality, etc. If activity data sources are different for each GHG source, add a paragraph explaining each source individually]

[Include a summary table for activity data of the category by GHG source for the entire time series. Unlike emission tables, in the activity data table the years should be entered as row headers, and GHG sources as column headers (see the example below and adapt it as appropriate). Please, take into account that activity data are also included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 5-37.**

[Category]: activity data by GHG source (activity data unit)

| ***Year*** | ***GHG source 1*** | ***GHG source 2*** | ***GHG source 3*** | ***GHG source 4*** | ***GHG source 5*** | ***GHG source N*** |
| --- | --- | --- | --- | --- | --- | --- |
| 1990 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1991 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1992 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1993 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1994 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1995 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1996 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1997 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1998 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1999 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2000 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2001 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2002 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2003 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2004 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2005 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2006 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2007 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2008 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2009 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2010 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2011 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2012 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2013 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2014 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2015 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2016 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2017 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2018 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2019 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2020 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2021 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2022 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |

Note:

Source:

* + - 1. **Emission factors applied in the category**

[Include a specific description of the emission factor sources (if taken from the *2006 IPCC Guidelines*, clearly indicate the table where they appear), assumptions used, rationale for choice of data, gaps and barriers, etc. In the case of country-specific emission factors, also indicate where they were obtained, the method used for obtaining them (literature, research, specific models, expert opinion, etc.), and the consistency with default emission factors of the *2006 IPCC Guidelines*]

[Include a summary table for emission factors used by GHG source, especially country-specific emission factors (see the example below and adapt it as appropriate). Please, take into account that emission factors could also be included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 5-38.**

[Category]: emission factors applied by GHG source

| ***GHG source*** | ***GHG*** | ***Value*** | ***Unit*** |
| --- | --- | --- | --- |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the emission factors]

* + 1. **Description of any flexibility applied to the category**

MPG: provisions 4-6.

[Clearly indicate the provisions to which flexibility is applied, concisely clarify capacity constraints, noting that some constraints may be relevant to several provisions, and provide self-determined estimated time frames for improvements in relation to those capacity constraints]

[Include a table on the specific flexibility provisions applied. Please take into account that the illustrative example below is part of the **Flex\_Summary** spreadsheet of the CRT and, thus, the country may also quote it directly in this document]

**Table 5-39.**

[Category]: flexibility provisions applied

| ***MPG flexibility provision*** | ***Gas*** | ***Description of the application of flexibility*** | ***Clarification of capacity constraint*** | ***Time frame for improvement*** | ***Progress made in addressing areas of improvement*** |
| --- | --- | --- | --- | --- | --- |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |

Note:

Source: [], based on the **Flex\_Summary** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the flexibility applied]

* + 1. **Uncertainty assessment and time-series consistency of the category**

MPG: provisions 26, 27, 29 and 44. Provision 29 offers flexibility to countries that may need it.

[Include a specific description of the quantitative estimate and qualitative discussion of the uncertainty of the category by GHG and GHG source for the starting year and the latest reporting year of the time series, indicate the main uncertainty sources (activity data or emission factors), include any other relevant qualitative description]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to uncertainty. If appropriate, include more detailed information on the uncertainty analysis of the category in Annex II and quote it in this section]

[Include a specific description of how the country ensured time-series consistency for each GHG source of the category, describe gaps and barriers observed, and any data splicing technique applied. It would be appropriate to apply, at a minimum, the time-series consistency activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the time-series consistency]

* + 1. **Category-specific QA/QC and verification**

MPG: provisions 34, 35 and 46. Provisions 34 and 35 offer flexibility to countries that may need it.

[Include a specific description of quality assurance and quality control activities applied by the country for each GHG source of the category. It would be appropriate to apply, at a minimum, the QA/QC activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to QA/QC activities. If appropriate, include more details on the category QA/QC activities in Annex IV]

* + 1. **Category-specific recalculations**

MPG: provisions 28 and 43.

[Include a specific description of the recalculations, indicating the justification for recalculations or any improvement made (in response to peer reviews, methodological changes, improved activity data, etc.), and the implications or effects these recalculations had on the GHG emission trend of the category]

[Include a table on the implications or effects that the recalculations had on the GHG emission trend of the category (see illustrative example below). Please take into account that the table is adapted from the **Table8s1** spreadsheet of the CRT and, thus, the country may quote the CRT directly in this document]

**Table 5-40.**

[Category]: comparison between previous inventory and current inventory (kt CO2 eq)

| ***NGI*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Previous NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Current NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Difference | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Difference % | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% |  |  |
| **Total effect %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |
| **Total effect net %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |

Note:

Source: [], based on the **Table8s1** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the recalculations]

* + 1. **Category-specific planned improvements**

MPG: provision 7.

[Include a specific description of the activities applied, in the process of being applied, or planned to improve the quality of the category (methods, activity data, emission factors, etc.), including, in particular, monitoring of activities detected by peer review processes or other review processes or previous analyses. It would probably be appropriate to include a table to systematize improvement activities. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the improvement plan]

* 1. **Urea application (CRT 3.H)**
     1. **Description and trend of GHGs in the category**

MPG: provisions 47, 48, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

[Include a theoretical description of the category and its subcategories or GHG sources pursuant to the *2006 IPCC Guidelines* only if deemed relevant. In addition, include a practical description of the category in the country, indicating what subcategories or GHG sources are present, their relevance at the national level and a completeness summary]

[Include a description of the category's GHGs, in kt CO2 eq, and an explanation on: (1) percentage contribution of the category to the sector's total emissions in the latest inventory year and its percentage change over time; (2) emissions of the latest inventory year, and their key drivers; (3) percentage contribution of each GHG source in the latest inventory year; (4) variation between the base year and the latest inventory year, and its key drivers; (5) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (6) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total GHG emissions of the category by GHG source (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 5-41.**

[Category]: total GHG emissions by subcategory (kt CO2 eq)

| ***Subcategory*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of total GHG emissions of the category by GHG source (in kt CO2 eq), 1990-2022]

**Figure 5-12.**

[Category]: total GHG emissions by source (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the category or subcategory or its GHG sources]

* + 1. **Methodological issues of the category**

MPG: provisions 17, 20-24, 39 and 40.

[Include a specific description of the methods and methodological tiers applied in the category, describe or specify equations applied and their direct reference to the *2006 IPCC Guidelines* or other guidelines used by the country. In addition, it would be appropriate to specify the tools used for the calculation of GHGs. This information may be a repetition of the general methodological issues of the category. If this is the case, quote the relevant section]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of this category. If appropriate, include more detailed information on the methodological issues of the category in Annex V.III]

* + - 1. **Activity data of the category**

[Include a specific description of the activity data sources, assumptions used, data splicing techniques, rationale for choice of data, gaps and barriers, handling of restricted data and confidentiality, etc. If activity data sources are different for each GHG source, add a paragraph explaining each source individually]

[Include a summary table for activity data of the category by GHG source for the entire time series. Unlike emission tables, in the activity data table the years should be entered as row headers, and GHG sources as column headers (see the example below and adapt it as appropriate). Please, take into account that activity data are also included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 5-42.**

[Category]: activity data name (activity data unit)

| ***Year*** | ***Source 1*** | ***Source 2*** | ***Source 3*** | ***Source 4*** | ***Source 5*** | ***Source 6*** | ***Source N...*** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1990 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1991 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1992 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1993 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1994 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1995 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1996 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1997 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1998 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1999 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2000 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2001 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2002 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2003 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2004 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2005 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2006 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2007 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2008 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2009 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2010 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2011 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2012 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2013 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2014 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2015 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2016 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2017 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2018 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2019 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2020 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2021 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2022 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the activity data]

* + - 1. **Emission factors applied in the category**

[Include a specific description of the emission factor sources (if taken from the *2006 IPCC Guidelines*, clearly indicate the table where they appear), assumptions used, rationale for choice of data, gaps and barriers, etc. In the case of country-specific emission factors, also indicate where they were obtained, the method used for obtaining them (literature, research, specific models, expert opinion, etc.), and the consistency with default emission factors of the *2006 IPCC Guidelines*]

[Include a summary table for emission factors used by GHG source, especially country-specific emission factors (see the example below and adapt it as appropriate). Please, take into account that emission factors could also be included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 5-43.**

[Category]: emission factors applied by GHG source

| ***GHG source*** | ***GHG*** | ***Value*** | ***Unit*** |
| --- | --- | --- | --- |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the emission factors]

* + 1. **Description of any flexibility applied to the category**

MPG: provisions 4-6.

[Clearly indicate the provisions to which flexibility is applied, concisely clarify capacity constraints, noting that some constraints may be relevant to several provisions, and provide self-determined estimated time frames for improvements in relation to those capacity constraints]

[Include a table on the specific flexibility provisions applied. Please take into account that the illustrative example below is part of the **Flex\_Summary** spreadsheet of the CRT and, thus, the country may also quote it directly in this document]

**Table 5-44.**

[Category]: flexibility provisions applied

| ***MPG flexibility provision*** | ***Gas*** | ***Description of the application of flexibility*** | ***Clarification of capacity constraint*** | ***Time frame for improvement*** | ***Progress made in addressing areas of improvement*** |
| --- | --- | --- | --- | --- | --- |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |

Note:

Source: [], based on the **Flex\_Summary** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the flexibility applied]

* + 1. **Uncertainty assessment and time-series consistency of the category**

MPG: provisions 26, 27, 29 and 44. Provision 29 offers flexibility to countries that may need it.

[Include a specific description of the quantitative estimate and qualitative discussion of the uncertainty of the category by GHG and GHG source for the starting year and the latest reporting year of the time series, indicate the main uncertainty sources (activity data or emission factors), include any other relevant qualitative description]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to uncertainty. If appropriate, include more detailed information on the uncertainty analysis of the category in Annex II and quote it in this section]

[Include a specific description of how the country ensured time-series consistency for each GHG source of the category, describe gaps and barriers observed, and any data splicing technique applied. It would be appropriate to apply, at a minimum, the time-series consistency activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the time-series consistency]

* + 1. **Category-specific QA/QC and verification**

MPG: provisions 34, 35 and 46. Provisions 34 and 35 offer flexibility to countries that may need it.

[Include a specific description of quality assurance and quality control activities applied by the country for each GHG source of the category. It would be appropriate to apply, at a minimum, the QA/QC activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to QA/QC activities. If appropriate, include more details on the category QA/QC activities in Annex IV]

* + 1. **Category-specific recalculations**

MPG: provisions 28 and 43.

[Include a specific description of the recalculations, indicating the justification for recalculations or any improvement made (in response to peer reviews, methodological changes, improved activity data, etc.), and the implications or effects these recalculations had on the GHG emission trend of the category]

[Include a table on the implications or effects that the recalculations had on the GHG emission trend of the category (see illustrative example below). Please take into account that the table is adapted from the **Table8s1** spreadsheet of the CRT and, thus, the country may quote the CRT directly in this document]

**Table 5-45.**

[Category]: comparison between previous inventory and current inventory (kt CO2 eq)

| ***NGI*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Previous NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Current NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Difference | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Difference % | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% |  |  |
| **Total effect %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |
| **Total effect net %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |

Note:

Source: [], based on the **Table8s1** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the recalculations]

* + 1. **Category-specific planned improvements**

MPG: provision 7.

[Include a specific description of the activities applied, in the process of being applied, or planned to improve the quality of the category (methods, activity data, emission factors, etc.), including, in particular, monitoring of activities detected by peer review processes or other review processes or previous analyses. It would probably be appropriate to include a table to systematize improvement activities. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the improvement plan]

* 1. **Other carbon-containing fertilizers (CRT 3.I)**
     1. **Description and trend of GHGs in the category**

MPG: provisions 47, 48, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

[Include a theoretical description of the category and its subcategories or GHG sources pursuant to the *2006 IPCC Guidelines* only if deemed relevant. In addition, include a practical description of the category in the country, indicating what subcategories or GHG sources are present, their relevance at the national level and a completeness summary]

[Include a description of the category's GHGs, in kt CO2 eq, and an explanation on: (1) percentage contribution of the category to the sector's total emissions in the latest inventory year and its percentage change over time; (2) emissions of the latest inventory year, and their key drivers; (3) percentage contribution of each GHG source in the latest inventory year; (4) variation between the base year and the latest inventory year, and its key drivers; (5) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (6) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total GHG emissions of the category by GHG source (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 5-46.**

[Category]: total GHG emissions by subcategory (kt CO2 eq)

| ***Subcategory*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of total GHG emissions of the category by GHG source (in kt CO2 eq), 1990-2022]

**Figure 5-13.**

[Category]: total GHG emissions by source (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the category or subcategory or its GHG sources]

* + 1. **Methodological issues of the category**

MPG: provisions 17, 20-24, 39 and 40.

[Include a specific description of the methods and methodological tiers applied in the category, describe or specify equations applied and their direct reference to the *2006 IPCC Guidelines* or other guidelines used by the country. In addition, it would be appropriate to specify the tools used for the calculation of GHGs. This information may be a repetition of the general methodological issues of the category. If this is the case, quote the relevant section]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of this category. If appropriate, include more detailed information on the methodological issues of the category in Annex V.III]

* + - 1. **Activity data of the category**

[Include a specific description of the activity data sources, assumptions used, data splicing techniques, rationale for choice of data, gaps and barriers, handling of restricted data and confidentiality, etc. If activity data sources are different for each GHG source, add a paragraph explaining each source individually]

[Include a summary table for activity data of the category by GHG source for the entire time series. Unlike emission tables, in the activity data table the years should be entered as row headers, and GHG sources as column headers (see the example below and adapt it as appropriate). Please, take into account that activity data are also included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 5-47.**

[Category]: activity data by GHG source (activity data unit)

| ***Year*** | ***GHG source 1*** | ***GHG source 2*** | ***GHG source 3*** | ***GHG source 4*** | ***GHG source 5*** | ***GHG source N*** |
| --- | --- | --- | --- | --- | --- | --- |
| 1990 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1991 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1992 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1993 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1994 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1995 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1996 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1997 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1998 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1999 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2000 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2001 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2002 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2003 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2004 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2005 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2006 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2007 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2008 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2009 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2010 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2011 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2012 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2013 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2014 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2015 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2016 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2017 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2018 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2019 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2020 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2021 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2022 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the activity data]

* + - 1. **Emission factors applied in the category**

[Include a specific description of the emission factor sources (if taken from the *2006 IPCC Guidelines*, clearly indicate the table where they appear), assumptions used, rationale for choice of data, gaps and barriers, etc. In the case of country-specific emission factors, also indicate where they were obtained, the method used for obtaining them (literature, research, specific models, expert opinion, etc.), and the consistency with default emission factors of the *2006 IPCC Guidelines*]

[Include a summary table for emission factors used by GHG source, especially country-specific emission factors (see the example below and adapt it as appropriate). Please, take into account that emission factors could also be included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 5-48.**

[Category]: emission factors applied by GHG source

| ***GHG source*** | ***GHG*** | ***Value*** | ***Unit*** |
| --- | --- | --- | --- |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the emission factors]

* + 1. **Description of any flexibility applied to the category**

MPG: provisions 4-6.

[Clearly indicate the provisions to which flexibility is applied, concisely clarify capacity constraints, noting that some constraints may be relevant to several provisions, and provide self-determined estimated time frames for improvements in relation to those capacity constraints]

[Include a table on the specific flexibility provisions applied. Please take into account that the illustrative example below is part of the **Flex\_Summary** spreadsheet of the CRT and, thus, the country may also quote it directly in this document]

**Table 5-49.**

[Category]: flexibility provisions applied

| ***MPG flexibility provision*** | ***Gas*** | ***Description of the application of flexibility*** | ***Clarification of capacity constraint*** | ***Time frame for improvement*** | ***Progress made in addressing areas of improvement*** |
| --- | --- | --- | --- | --- | --- |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |

Note:

Source: [], based on the **Flex\_Summary** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the flexibility applied]

* + 1. **Uncertainty assessment and time-series consistency of the category**

MPG: provisions 26, 27, 29 and 44. Provision 29 offers flexibility to countries that may need it.

[Include a specific description of the quantitative estimate and qualitative discussion of the uncertainty of the category by GHG and GHG source for the starting year and the latest reporting year of the time series, indicate the main uncertainty sources (activity data or emission factors), include any other relevant qualitative description]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to uncertainty. If appropriate, include more detailed information on the uncertainty analysis of the category in Annex II and quote it in this section]

[Include a specific description of how the country ensured time-series consistency for each GHG source of the category, describe gaps and barriers observed, and any data splicing technique applied. It would be appropriate to apply, at a minimum, the time-series consistency activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the time-series consistency]

* + 1. **Category-specific QA/QC and verification**

MPG: provisions 34, 35 and 46. Provisions 34 and 35 offer flexibility to countries that may need it.

[Include a specific description of quality assurance and quality control activities applied by the country for each GHG source of the category. It would be appropriate to apply, at a minimum, the QA/QC activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to QA/QC activities. If appropriate, include more details on the category QA/QC activities in Annex IV]

* + 1. **Category-specific recalculations**

MPG: provisions 28 and 43.

[Include a specific description of the recalculations, indicating the justification for recalculations or any improvement made (in response to peer reviews, methodological changes, improved activity data, etc.), and the implications or effects these recalculations had on the GHG emission trend of the category]

[Include a table on the implications or effects that the recalculations had on the GHG emission trend of the category (see illustrative example below). Please take into account that the table is adapted from the **Table8s1** spreadsheet of the CRT and, thus, the country may quote the CRT directly in this document]

**Table 5-50.**

[Category]: comparison between previous inventory and current inventory (kt CO2 eq)

| ***NGI*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Previous NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Current NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Difference | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Difference % | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% |  |  |
| **Total effect %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |
| **Total effect net %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |

Note:

Source: [], based on the **Table8s1** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the recalculations]

* + 1. **Category-specific planned improvements**

MPG: provision 7.

[Include a specific description of the activities applied, in the process of being applied, or planned to improve the quality of the category (methods, activity data, emission factors, etc.), including, in particular, monitoring of activities detected by peer review processes or other review processes or previous analyses. It would probably be appropriate to include a table to systematize improvement activities. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the improvement plan]

* 1. **Other (specify) (CRT 3.J)**

[Only if applicable]

1. **LAND USE, LAND-USE CHANGE AND FORESTRY (CRT 4)**
   1. **Overview of the sector**

MPG: provisions 47, 48, 50, 51, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

* + 1. **Description of the sector**

[Include a theoretical description of the sector, its categories, GHG sources and sinks, and carbon stocks, pursuant to the *2006 IPCC Guidelines* only if deemed relevant. In addition, include a practical description of the sector in the country, indicating what categories, GHG sources and sinks, and carbon stocks, are present, their relevance at the national level and a completeness summary]

* + 1. **Trend in the sector's GHG**

[Include the sector's report table for the latest inventory year by categories and subcategories, and an explanation on emissions and removals by each GHG and precursor gas in the total emissions for the sector (kt for each GHG and precursor)]

**Table 6-1.**

LULUCF sector: emissions and removals by GHG, category and subcategory (kt) for [latest inventory year]

| ***Code*** | ***GHG source and sink categories*** | ***Net CO2***  ***(kt)*** | ***CH4***  ***(kt)*** | ***N2O***  ***(kt)*** | ***NOx***  ***(kt)*** | ***CO***  ***(kt)*** | ***NMVOC*** ***(kt)*** | ***Total GHG***  ***(kt CO2 eq)*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **4.** | **Land use, land-use change and forestry** |  |  |  |  |  |  |  |
| 4.A. | Forest land |  |  |  |  |  |  |  |
| 4.A.1. | Forest land remaining forest land |  |  |  |  |  |  |  |
| 4.A.2. | Land converted to forest land |  |  |  |  |  |  |  |
| 4.A.2.a. | Cropland converted to forest land |  |  |  |  |  |  |  |
| 4.A.2.b. | Grassland converted to forest land |  |  |  |  |  |  |  |
| 4.A.2.c. | Wetlands converted to forest land |  |  |  |  |  |  |  |
| 4.A.2.d. | Settlements converted to forest land |  |  |  |  |  |  |  |
| 4.A.2.e. | Other land converted to forest land |  |  |  |  |  |  |  |
| 4.B. | Cropland |  |  |  |  |  |  |  |
| 4.B.1. | Cropland remaining cropland |  |  |  |  |  |  |  |
| 4.B.2. | Land converted to cropland |  |  |  |  |  |  |  |
| 4.B.2.a. | Forest land converted to cropland |  |  |  |  |  |  |  |
| 4.B.2.b. | Grassland converted to cropland |  |  |  |  |  |  |  |
| 4.B.2.c. | Wetlands converted to cropland |  |  |  |  |  |  |  |
| 4.B.2.d. | Settlements converted to cropland |  |  |  |  |  |  |  |
| 4.B.2.e. | Other lands converted to cropland |  |  |  |  |  |  |  |
| 4.C. | Grassland |  |  |  |  |  |  |  |
| 4.C.1. | Grassland remaining grassland |  |  |  |  |  |  |  |
| 4.C.2. | Land converted to grassland |  |  |  |  |  |  |  |
| 4.C.2.a. | Forest land converted to grassland |  |  |  |  |  |  |  |
| 4.C.2.b. | Cropland converted to grassland |  |  |  |  |  |  |  |
| 4.C.2.c. | Wetlands converted to grassland |  |  |  |  |  |  |  |
| 4.C.2.d. | Settlements converted to grassland |  |  |  |  |  |  |  |
| 4.C.2.e. | Other land converted to grassland |  |  |  |  |  |  |  |
| 4.D. | Wetlands |  |  |  |  |  |  |  |
| 4.D.1. | Wetlands remaining wetlands |  |  |  |  |  |  |  |
| 4.D.2. | Land converted to wetlands |  |  |  |  |  |  |  |
| 4.D.2.a. | Forest land converted to wetlands |  |  |  |  |  |  |  |
| 4.D.2.b. | Cropland converted to wetlands |  |  |  |  |  |  |  |
| 4.D.2.c. | Grassland converted to wetlands |  |  |  |  |  |  |  |
| 4.D.2.d. | Settlements converted to wetlands |  |  |  |  |  |  |  |
| 4.D.2.e. | Other land converted to wetlands |  |  |  |  |  |  |  |
| 4.E. | Settlements |  |  |  |  |  |  |  |
| 4.E.1. | Settlements remaining as settlements |  |  |  |  |  |  |  |
| 4.E.2. | Land converted to settlements |  |  |  |  |  |  |  |
| 4.E.2.a. | Forest land converted to settlements |  |  |  |  |  |  |  |
| 4.E.2.b. | Cropland converted to settlements |  |  |  |  |  |  |  |
| 4.E.2.c. | Grassland converted to settlements |  |  |  |  |  |  |  |
| 4.E.2.d. | Wetlands converted to settlements |  |  |  |  |  |  |  |
| 4.E.2.e. | Other land converted to settlements |  |  |  |  |  |  |  |
| 4.F. | Other land |  |  |  |  |  |  |  |
| 4.F.1. | Other land remaining other land |  |  |  |  |  |  |  |
| 4.F.2. | Land converted to other land |  |  |  |  |  |  |  |
| 4.F.2.a. | Forest land converted to other land |  |  |  |  |  |  |  |
| 4.F.2.b. | Cropland converted to other land |  |  |  |  |  |  |  |
| 4.F.2.c. | Grassland converted to other land |  |  |  |  |  |  |  |
| 4.F.2.d. | Wetlands converted to other land |  |  |  |  |  |  |  |
| 4.F.2.e. | Settlements converted to other land |  |  |  |  |  |  |  |
| 4.G. | Harvested wood products |  |  |  |  |  |  |  |
| 4.H. | Other (please specify) |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  | ***Memo items*** |  |  |  |  |  |  |  |
|  | Emissions and subsequent removals from natural disturbances on managed lands |  |  |  |  |  |  |  |

Note: Use the following notation keys where numerical data are not available: NA = not applicable; NE = not estimated; NO = not occurring; IE = included elsewhere; C = confidential.

Source: [], based on the **Table4** spreadsheet of the CRT.

[Include a description of the sector's GHGs, in kt CO2 eq, and an explanation on: (1) percentage contribution of the sector to national total net emissions in the latest inventory year and its percentage change over time; (2) emissions and removals of the latest inventory year, and their key drivers; (3) percentage contribution of each category or subcategory in the latest inventory year; (4) variation between the base year and the latest inventory year, and its key drivers; (5) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (6) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total net GHG of the sector inventory by category or subcategory (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 6-2.**

LULUCF sector: total net GHG by category (kt CO2 eq)

| ***Category*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total net** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source: [], based on the **Table10s1** spreadsheet of the CRT.

[Include a summary figure of total net GHG of the sector inventory by category or subcategory (in kt CO2 eq), 1990-2022]

**Figure 6-1.**

LULUCF sector: total net GHG by category or subcategory (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the sector trend]

[Include a description of each GHG (CO2, CH4 and N2O), in kt CO2 eq, and an explanation on: (1) emissions and removals by GHG of the latest inventory year, and their key drivers; (2) percentage contribution of each GHG in the latest inventory year; (3) variation between the base year and the latest inventory year by GHG, and its key drivers; (4) variation compared to the latest inventory year of the previous inventory by GHG, and its key drivers; and (5) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year by GHG, and its key drivers]

[Include a summary table on each GHG of the sector inventory. At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 6-3.**

LULUCF sector: total net by GHG (kt CO2 eq)

| ***GHG*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| CO2 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| CH4 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| N2O | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total net** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of each GHG of the sector inventory (kt CO2 eq), 1990-2022]

**Figure 6-2.**

LULUCF sector: total net by GHG (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the GHG trend in the sector inventory by GHG]

[Include a very brief description of each precursor (NOx, CO, NMVOC and SOX), and an explanation on: (1) emissions by precursor of the latest inventory year, and their key drivers; (2) percentage contribution of each precursor in the latest inventory year; (3) variation between the base year and the latest inventory year by precursor, and its key drivers; (4) variation compared to the latest inventory year of the previous inventory by precursor, and its key drivers; and (5) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year by precursor, and its key drivers]

[Include a summary table on each precursor of the sector inventory. At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 6-4.**

LULUCF sector: emissions by precursor (kt)

| ***Precursor*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| NOx | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| CO | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| NMVOC | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| SOX | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of each precursor of the sector inventory (kt), 1990-2022]

**Figure 6-3.**

LULUCF sector: emissions by precursor (kt), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the precursor trend in the sector inventory by precursor]

[If appropriate, include a very brief description of each of the other substances that have an impact on climate (for example, carbon black emissions, tropospheric ozone, particulate matter, other short-lived climate pollutants, etc.), in kt, and an explanation on: (1) emissions by other substances of the latest inventory year, and their key drivers; (2) percentage contribution of other substances in the latest inventory year; (3) variation between the base year and the latest inventory year for other substances, and its key drivers; (4) variation compared to the latest inventory year of the previous inventory for other substances, and its key drivers; and (5) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year for other substances, and its key drivers]

[Include, if appropriate, a summary table on each of the other substances that have an impact on climate of the sector inventory. At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 6-5.**

LULUCF sector: emissions of other substances that have an impact on climate (kt)

| ***Substance*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include, if appropriate, a figure summary on each of the other substances that have an impact on climate of the sector inventory (kt), 1990-2022]

**Figure 6-4.**

LULUCF sector: emissions of other substances that have an impact on climate (kt), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include, if appropriate, any conclusion or relevant aspect that the country may want to highlight pertaining to the trend in other substances that have an impact on climate of the sector inventory by substance]

* + 1. **General methodological issues of the sector**

MPG: provisions 17, 20-24, 39 and 40.

[Include a very general description of methods and methodological tiers applied, and tools used to calculate GHGs, precursor gases, and, if appropriate, other substances that have an impact on climate (for example, carbon black)]

[If a country is unable to adopt a higher tier method for a specific key category due to lack of resources, the country can use a tier 1 approach. In such cases, the country should clearly document why the methodological choice was not in line with the corresponding decision tree of the *2006 IPCC Guidelines*]

[Include a very general description of the activity data sources for the sector]

[Include a very general description of the emission factor sources. For country-specific emission factors, indicate where they were obtained and which of the subsequent sections provides more information]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of the sector. If appropriate, include more detailed information on the methodological issues of the sector in Annex V.IV. In the case of other substances that have an impact on climate (for example, carbon black), include details on its methodological issues in Annex V.VI]

* 1. **Land-use definitions and land representation approaches**

[Include land-use definitions for the country and the classification system used (if appropriate, include the legal or judicial frameworks) and their correspondence to the categories and definitions of the LULUCF sector of the *2006 IPCC Guidelines*.

* 1. **Country-specific approaches**
     1. **Information on approaches used for representing land areas and on land-use databases used for the inventory preparation**

[Include information on the methods or tools used by the country for land cover representation and the land-use databases used to prepare the inventory. Include land use and land-use change matrices or an illustrative example]

* + 1. **Information on approaches used for natural disturbances**

MPG: provision 55.

[In the case of a country addressing the emissions and subsequent removals from natural disturbances on managed lands in its inventory, that country shall report information on the approach taken, and how it is consistent with IPCC guidance, as appropriate, and shall indicate if the estimates are indicated in national totals]

* + 1. **Information on approaches used for reporting harvested wood products**

MPG: provision 56.

[In the case of a country using an approach to reporting emissions and removals from harvested wood products in accordance with IPCC guidance other than the production approach, that country shall also provide supplementary information on emissions and removals from harvested wood products estimated using the production approach]

* 1. **Forest land (CRT 4.A)**
     1. **Description and trend of GHGs in the category**

MPG: provisions 47, 48, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

[Include a theoretical description of the category, its subcategories, GHG sources and sinks pursuant to the *2006 IPCC Guidelines* only if deemed relevant. In addition, include a practical description of the category in the country, indicating what subcategories, GHG sources and sinks are present, their relevance at the national level and a completeness summary]

[Include a description of the category's GHGs, in kt CO2 eq, and an explanation on: (1) percentage contribution of the category to the sector's total net emissions in the latest inventory year and its percentage change over time; (2) emissions of the latest inventory year, and their key drivers; (3) percentage contribution of each subcategory in the latest inventory year; (4) variation between the base year and the latest inventory year, and its key drivers; (5) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (6) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total net GHG of the category by subcategory, GHG source or sink (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 6-6.**

[Category]: total net GHG by subcategory (kt CO2 eq)

| ***Subcategory*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total net** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of total net GHG of the category by subcategory (in kt CO2 eq), 1990-2022]

**Figure 6-5.**

[Category]: total net GHG by subcategory (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the category or subcategories or its GHG sources or sinks]

* + 1. **Methodological issues of the category**

MPG: provisions 17, 20-24, 39 and 40.

[Include a specific description of the methods and methodological tiers applied in the category, describe or specify equations applied and their direct reference to the *2006 IPCC Guidelines* or other guidelines used by the country. In addition, it would be appropriate to specify the tools used for the calculation of GHGs. This information may be a repetition of the general methodological issues of the category. If this is the case, quote the relevant section]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of this category. If appropriate, include more detailed information on the methodological issues of the category in Annex V.IV.]

* + - 1. **Specific activity data of the category**

[Include a specific description of the activity data sources, assumptions used, data splicing techniques, rationale for choice of data, gaps and barriers, handling of restricted data and confidentiality, etc. If activity data sources are different for each GHG source or sink, add a paragraph explaining each source individually]

[Include a summary table for activity data of the category by GHG source or sink for the entire time series. Unlike emission tables, in the activity data table the years should be entered as row headers, and GHG sources or sinks as column headers (see the example below and adapt it as appropriate). Please, take into account that activity data are also included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 6-7.**

[Category]: activity data by GHG source or sink (activity data unit)

| ***Year*** | ***GHG source 1*** | ***GHG source 2*** | ***GHG source 3*** | ***GHG source 4*** | ***GHG source 5*** | ***GHG source N*** |
| --- | --- | --- | --- | --- | --- | --- |
| 1990 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1991 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1992 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1993 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1994 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1995 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1996 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1997 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1998 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1999 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2000 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2001 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2002 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2003 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2004 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2005 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2006 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2007 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2008 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2009 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2010 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2011 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2012 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2013 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2014 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2015 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2016 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2017 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2018 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2019 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2020 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2021 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2022 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the activity data]

* + - 1. **Emission factors applied in the category**

[Include a specific description of the emission factor sources (if taken from the *2006 IPCC Guidelines*, clearly indicate the table where they appear), assumptions used, rationale for choice of data, gaps and barriers, etc. In the case of country-specific emission factors, also indicate where they were obtained, the method used for obtaining them (literature, research, specific models, expert opinion, etc.), and the consistency with default emission factors of the *2006 IPCC Guidelines*]

[Include a summary table for emission factors used by GHG source or sink, especially country-specific emission factors (see the example below and adapt it as appropriate). Please, take into account that emission factors could also be included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 6-8.**

[Category]: emission factors applied by GHG source or sink

| ***GHG source or sink*** | ***GHG*** | ***Value*** | ***Unit*** |
| --- | --- | --- | --- |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the emission factors]

* + 1. **Description of any flexibility applied to the category**

MPG: provisions 4-6.

[Clearly indicate the provisions to which flexibility is applied, concisely clarify capacity constraints, noting that some constraints may be relevant to several provisions, and provide self-determined estimated time frames for improvements in relation to those capacity constraints]

[Include a table on the specific flexibility provisions applied. Please take into account that the illustrative example below is part of the **Flex\_Summary** spreadsheet of the CRT and, thus, the country may also quote it directly in this document]

**Table 6-9.**

[Category]: flexibility provisions applied

| ***MPG flexibility provision*** | ***Gas*** | ***Description of the application of flexibility*** | ***Clarification of capacity constraint*** | ***Time frame for improvement*** | ***Progress made in addressing areas of improvement*** |
| --- | --- | --- | --- | --- | --- |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |

Note:

Source: [], based on the **Flex\_Summary** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the flexibility applied]

* + 1. **Uncertainty assessment and time-series consistency of the category**

MPG: provisions 26, 27, 29 and 44. Provision 29 offers flexibility to countries that may need it.

[Include a specific description of the quantitative estimate and qualitative discussion of the uncertainty of the category by GHG and GHG source and sink for the starting year and the latest reporting year of the time series, indicate the main uncertainty sources (activity data or emission factors), include any other relevant qualitative description]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to uncertainty. If appropriate, include more detailed information on the uncertainty analysis of the category in Annex II and quote it in this section]

[Include a specific description of how the country ensured time-series consistency for each GHG source and sink of the category, describe gaps and barriers observed, and any data splicing technique applied. It would be appropriate to apply, at a minimum, the time-series consistency activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the time-series consistency]

* + 1. **Category-specific QA/QC and verification**

MPG: provisions 34, 35 and 46. Provisions 34 and 35 offer flexibility to countries that may need it.

[Include a specific description of quality assurance and quality control activities applied by the country for each GHG source or sink of the category. It would be appropriate to apply, at a minimum, the QA/QC activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to QA/QC activities. If appropriate, include more details on the category QA/QC activities in Annex IV]

* + 1. **Category-specific recalculations**

MPG: provisions 28 and 43.

[Include a specific description of the recalculations, indicating the justification for recalculations or any improvement made (in response to peer reviews, methodological changes, improved activity data, etc.), and the implications or effects these recalculations had on the GHG emission and removal trend of the category]

[Include a table on the implications or effects that the recalculations had on the GHG emission or removal trend of the category (see illustrative example below). Please take into account that the table is adapted from the **Table8s1** spreadsheet of the CRT and, thus, the country may quote the CRT directly in this document]

**Table 6-10.**

[Category]: comparison between previous inventory and current inventory (kt CO2 eq)

| ***NGI*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Previous NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Current NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Difference | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Difference % | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% |  |  |
| **Total effect net %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |

Note:

Source: [], based on the **Table8s1** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the recalculations]

* + 1. **Category-specific planned improvements**

MPG: provision 7.

[Include a specific description of the activities applied, in the process of being applied, or planned to improve the quality of the category (methods, activity data, emission factors, etc.), including, in particular, monitoring of activities detected by peer review processes or other review processes or previous analyses. It would probably be appropriate to include a table to systematize improvement activities. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the improvement plan]

* 1. **Cropland (CRT 4.B)**
     1. **Description and trend of GHGs in the category**

MPG: provisions 47, 48, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

[Include a theoretical description of the category, its subcategories, GHG sources and sinks pursuant to the *2006 IPCC Guidelines* only if deemed relevant. In addition, include a practical description of the category in the country, indicating what subcategories, GHG sources and sinks are present, their relevance at the national level and a completeness summary]

[Include a description of the category's GHGs, in kt CO2 eq, and an explanation on: (1) percentage contribution of the category to the sector's total net emissions in the latest inventory year and its percentage change over time; (2) emissions of the latest inventory year, and their key drivers; (3) percentage contribution of each subcategory in the latest inventory year; (4) variation between the base year and the latest inventory year, and its key drivers; (5) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (6) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total net GHG of the category by subcategory, GHG source or sink (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 6-11.**

[Category]: total net GHG by subcategory (kt CO2 eq)

| ***Subcategory*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total net** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of total net GHG of the category by subcategory (in kt CO2 eq), 1990-2022]

**Figure 6-6.**

[Category]: total net GHG by subcategory (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the category or subcategories or its GHG sources or sinks]

* + 1. **Methodological issues of the category**

MPG: provisions 17, 20-24, 39 and 40.

[Include a specific description of the methods and methodological tiers applied in the category, describe or specify equations applied and their direct reference to the *2006 IPCC Guidelines* or other guidelines used by the country. In addition, it would be appropriate to specify the tools used for the calculation of GHGs. This information may be a repetition of the general methodological issues of the category. If this is the case, quote the relevant section]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of this category. If appropriate, include more detailed information on the methodological issues of the category in Annex V.IV]

* + - 1. **Specific activity data of the category**

[Include a specific description of the activity data sources, assumptions used, data splicing techniques, rationale for choice of data, gaps and barriers, handling of restricted data and confidentiality, etc. If activity data sources are different for each GHG source or sink, add a paragraph explaining each source individually]

[Include a summary table for activity data of the category by GHG source or sink for the entire time series. Unlike emission tables, in the activity data table the years should be entered as row headers, and GHG sources or sinks as column headers (see the example below and adapt it as appropriate). Please, take into account that activity data are also included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 6-12.**

[Category]: activity data by GHG source or sink (activity data unit)

| ***Year*** | ***GHG source 1*** | ***GHG source 2*** | ***GHG source 3*** | ***GHG source 4*** | ***GHG source 5*** | ***GHG source N*** |
| --- | --- | --- | --- | --- | --- | --- |
| 1990 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1991 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1992 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1993 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1994 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1995 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1996 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1997 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1998 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1999 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2000 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2001 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2002 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2003 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2004 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2005 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2006 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2007 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2008 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2009 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2010 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2011 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2012 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2013 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2014 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2015 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2016 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2017 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2018 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2019 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2020 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2021 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2022 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the activity data]

* + - 1. **Emission factors applied in the category**

[Include a specific description of the emission factor sources (if taken from the *2006 IPCC Guidelines*, clearly indicate the table where they appear), assumptions used, rationale for choice of data, gaps and barriers, etc. In the case of country-specific emission factors, also indicate where they were obtained, the method used for obtaining them (literature, research, specific models, expert opinion, etc.), and the consistency with default emission factors of the *2006 IPCC Guidelines*]

[Include a summary table for emission factors used by GHG source or sink, especially country-specific emission factors (see the example below and adapt it as appropriate). Please, take into account that emission factors could also be included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 6-13.**

[Category]: emission factors applied by GHG source or sink

| ***GHG source or sink*** | ***GHG*** | ***Value*** | ***Unit*** |
| --- | --- | --- | --- |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the emission factors]

* + 1. **Description of any flexibility applied to the category**

MPG: provisions 4-6.

[Clearly indicate the provisions to which flexibility is applied, concisely clarify capacity constraints, noting that some constraints may be relevant to several provisions, and provide self-determined estimated time frames for improvements in relation to those capacity constraints]

[Include a table on the specific flexibility provisions applied. Please take into account that the illustrative example below is part of the **Flex\_Summary** spreadsheet of the CRT and, thus, the country may also quote it directly in this document]

**Table 6-14.**

[Category]: flexibility provisions applied

| ***MPG flexibility provision*** | ***Gas*** | ***Description of the application of flexibility*** | ***Clarification of capacity constraint*** | ***Time frame for improvement*** | ***Progress made in addressing areas of improvement*** |
| --- | --- | --- | --- | --- | --- |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |

Note:

Source: [], based on the **Flex\_Summary** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the flexibility applied]

* + 1. **Uncertainty assessment and time-series consistency of the category**

MPG: provisions 26, 27, 29 and 44. Provision 29 offers flexibility to countries that may need it.

[Include a specific description of the quantitative estimate and qualitative discussion of the uncertainty of the category by GHG and GHG source and sink for the starting year and the latest reporting year of the time series, indicate the main uncertainty sources (activity data or emission factors), include any other relevant qualitative description]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to uncertainty. If appropriate, include more detailed information on the uncertainty analysis of the category in Annex II and quote it in this section]

[Include a specific description of how the country ensured time-series consistency for each GHG source and sink of the category, describe gaps and barriers observed, and any data splicing technique applied. It would be appropriate to apply, at a minimum, the time-series consistency activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the time-series consistency]

* + 1. **Category-specific QA/QC and verification**

MPG: provisions 34, 35 and 46. Provisions 34 and 35 offer flexibility to countries that may need it.

[Include a specific description of quality assurance and quality control activities applied by the country for each GHG source or sink of the category. It would be appropriate to apply, at a minimum, the QA/QC activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to QA/QC activities. If appropriate, include more details on the category QA/QC activities in Annex IV]

* + 1. **Category-specific recalculations**

MPG: provisions 28 and 43.

[Include a specific description of the recalculations, indicating the justification for recalculations or any improvement made (in response to peer reviews, methodological changes, improved activity data, etc.), and the implications or effects these recalculations had on the GHG emission and removal trend of the category]

[Include a table on the implications or effects that the recalculations had on the GHG emission or removal trend of the category (see illustrative example below). Please take into account that the table is adapted from the **Table8s1** spreadsheet of the CRT and, thus, the country may quote the CRT directly in this document]

**Table 6-15.**

[Category]: comparison between previous inventory and current inventory (kt CO2 eq)

| ***NGI*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Previous NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Current NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Difference | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Difference % | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% |  |  |
| **Total effect net %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |

Note:

Source: [], based on the **Table8s1** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the recalculations]

* + 1. **Category-specific planned improvements**

MPG: provision 7.

[Include a specific description of the activities applied, in the process of being applied, or planned to improve the quality of the category (methods, activity data, emission factors, etc.), including, in particular, monitoring of activities detected by peer review processes or other review processes or previous analyses. It would probably be appropriate to include a table to systematize improvement activities. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the improvement plan]

* 1. **Grassland (CRT 4.C)**
     1. **Description and trend of GHGs in the category**

MPG: provisions 47, 48, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

[Include a theoretical description of the category, its subcategories, GHG sources and sinks pursuant to the *2006 IPCC Guidelines* only if deemed relevant. In addition, include a practical description of the category in the country, indicating what subcategories, GHG sources and sinks are present, their relevance at the national level and a completeness summary]

[Include a description of the category's GHGs, in kt CO2 eq, and an explanation on: (1) percentage contribution of the category to the sector's total net emissions in the latest inventory year and its percentage change over time; (2) emissions of the latest inventory year, and their key drivers; (3) percentage contribution of each subcategory in the latest inventory year; (4) variation between the base year and the latest inventory year, and its key drivers; (5) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (6) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total net GHG of the category by subcategory, GHG source or sink (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 6-16.**

[Category]: total net GHG by subcategory (kt CO2 eq)

| ***Subcategory*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total net** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of total net GHG of the category by subcategory (in kt CO2 eq), 1990-2022]

**Figure 6-7.**

[Category]: total net GHG by subcategory (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the category or subcategories or its GHG sources or sinks]

* + 1. **Methodological issues of the category**

MPG: provisions 17, 20-24, 39 and 40.

[Include a specific description of the methods and methodological tiers applied in the category, describe or specify equations applied and their direct reference to the *2006 IPCC Guidelines* or other guidelines used by the country. In addition, it would be appropriate to specify the tools used for the calculation of GHGs. This information may be a repetition of the general methodological issues of the category. If this is the case, quote the relevant section]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of this category. If appropriate, include more detailed information on the methodological issues of the category in Annex V.IV]

* + - 1. **Specific activity data of the category**

[Include a specific description of the activity data sources, assumptions used, data splicing techniques, rationale for choice of data, gaps and barriers, handling of restricted data and confidentiality, etc. If activity data sources are different for each GHG source or sink, add a paragraph explaining each source individually]

[Include a summary table for activity data of the category by GHG source or sink for the entire time series. Unlike emission tables, in the activity data table the years should be entered as row headers, and GHG sources or sinks as column headers (see the example below and adapt it as appropriate). Please, take into account that activity data are also included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 6-17.**

[Category]: activity data by GHG source or sink (activity data unit)

| ***Year*** | ***GHG source 1*** | ***GHG source 2*** | ***GHG source 3*** | ***GHG source 4*** | ***GHG source 5*** | ***GHG source N*** |
| --- | --- | --- | --- | --- | --- | --- |
| 1990 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1991 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1992 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1993 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1994 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1995 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1996 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1997 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1998 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1999 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2000 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2001 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2002 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2003 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2004 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2005 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2006 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2007 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2008 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2009 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2010 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2011 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2012 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2013 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2014 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2015 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2016 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2017 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2018 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2019 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2020 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2021 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2022 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the activity data]

* + - 1. **Emission factors applied in the category**

[Include a specific description of the emission factor sources (if taken from the *2006 IPCC Guidelines*, clearly indicate the table where they appear), assumptions used, rationale for choice of data, gaps and barriers, etc. In the case of country-specific emission factors, also indicate where they were obtained, the method used for obtaining them (literature, research, specific models, expert opinion, etc.), and the consistency with default emission factors of the *2006 IPCC Guidelines*]

[Include a summary table for emission factors used by GHG source or sink, especially country-specific emission factors (see the example below and adapt it as appropriate). Please, take into account that emission factors could also be included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 6-18.**

[Category]: emission factors applied by GHG source or sink

| ***GHG source or sink*** | ***GHG*** | ***Value*** | ***Unit*** |
| --- | --- | --- | --- |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the emission factors]

* + 1. **Description of any flexibility applied to the category**

MPG: provisions 4-6.

[Clearly indicate the provisions to which flexibility is applied, concisely clarify capacity constraints, noting that some constraints may be relevant to several provisions, and provide self-determined estimated time frames for improvements in relation to those capacity constraints]

[Include a table on the specific flexibility provisions applied. Please take into account that the illustrative example below is part of the **Flex\_Summary** spreadsheet of the CRT and, thus, the country may also quote it directly in this document]

**Table 6-19.**

[Category]: flexibility provisions applied

| ***MPG flexibility provision*** | ***Gas*** | ***Description of the application of flexibility*** | ***Clarification of capacity constraint*** | ***Time frame for improvement*** | ***Progress made in addressing areas of improvement*** |
| --- | --- | --- | --- | --- | --- |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |

Note:

Source: [], based on the **Flex\_Summary** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the flexibility applied]

* + 1. **Uncertainty assessment and time-series consistency of the category**

MPG: provisions 26, 27, 29 and 44. Provision 29 offers flexibility to countries that may need it.

[Include a specific description of the quantitative estimate and qualitative discussion of the uncertainty of the category by GHG and GHG source and sink for the starting year and the latest reporting year of the time series, indicate the main uncertainty sources (activity data or emission factors), include any other relevant qualitative description]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to uncertainty. If appropriate, include more detailed information on the uncertainty analysis of the category in Annex II and quote it in this section]

[Include a specific description of how the country ensured time-series consistency for each GHG source and sink of the category, describe gaps and barriers observed, and any data splicing technique applied. It would be appropriate to apply, at a minimum, the time-series consistency activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the time-series consistency]

* + 1. **Category-specific QA/QC and verification**

MPG: provisions 34, 35 and 46. Provisions 34 and 35 offer flexibility to countries that may need it.

[Include a specific description of quality assurance and quality control activities applied by the country for each GHG source or sink of the category. It would be appropriate to apply, at a minimum, the QA/QC activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to QA/QC activities. If appropriate, include more details on the category QA/QC activities in Annex IV]

* + 1. **Category-specific recalculations**

MPG: provisions 28 and 43.

[Include a specific description of the recalculations, indicating the justification for recalculations or any improvement made (in response to peer reviews, methodological changes, improved activity data, etc.), and the implications or effects these recalculations had on the GHG emission and removal trend of the category]

[Include a table on the implications or effects that the recalculations had on the GHG emission or removal trend of the category (see illustrative example below). Please take into account that the table is adapted from the **Table8s1** spreadsheet of the CRT and, thus, the country may quote the CRT directly in this document]

**Table 6-20.**

[Category]: comparison between previous inventory and current inventory (kt CO2 eq)

| ***NGI*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Previous NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Current NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Difference | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Difference % | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% |  |  |
| **Total effect net %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |

Note:

Source: [], based on the **Table8s1** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the recalculations]

* + 1. **Category-specific planned improvements**

MPG: provision 7.

[Include a specific description of the activities applied, in the process of being applied, or planned to improve the quality of the category (methods, activity data, emission factors, etc.), including, in particular, monitoring of activities detected by peer review processes or other review processes or previous analyses. It would probably be appropriate to include a table to systematize improvement activities. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the improvement plan]

* 1. **Wetlands (CRT 4.D)**
     1. **Description and trend of GHGs in the category**

MPG: provisions 47, 48, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

[Include a theoretical description of the category, its subcategories, GHG sources and sinks pursuant to the *2006 IPCC Guidelines* only if deemed relevant. In addition, include a practical description of the category in the country, indicating what subcategories, GHG sources and sinks are present, their relevance at the national level and a completeness summary]

[Include a description of the category's GHGs, in kt CO2 eq, and an explanation on: (1) percentage contribution of the category to the sector's total net emissions in the latest inventory year and its percentage change over time; (2) emissions of the latest inventory year, and their key drivers; (3) percentage contribution of each subcategory in the latest inventory year; (4) variation between the base year and the latest inventory year, and its key drivers; (5) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (6) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total net GHG of the category by subcategory, GHG source or sink (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 6-21.**

[Category]: total net GHG by subcategory (kt CO2 eq)

| ***Subcategory*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total net** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of total net GHG of the category by subcategory (in kt CO2 eq), 1990-2022]

**Figure 6-8.**

[Category]: total net GHG by subcategory (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the category or subcategories or its GHG sources or sinks]

* + 1. **Methodological issues of the category**

MPG: provisions 17, 20-24, 39 and 40.

[Include a specific description of the methods and methodological tiers applied in the category, describe or specify equations applied and their direct reference to the *2006 IPCC Guidelines* or other guidelines used by the country. In addition, it would be appropriate to specify the tools used for the calculation of GHGs. This information may be a repetition of the general methodological issues of the category. If this is the case, quote the relevant section]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of this category. If appropriate, include more detailed information on the methodological issues of the category in Annex V.IV]

* + - 1. **Specific activity data of the category**

[Include a specific description of the activity data sources, assumptions used, data splicing techniques, rationale for choice of data, gaps and barriers, handling of restricted data and confidentiality, etc. If activity data sources are different for each GHG source or sink, add a paragraph explaining each source individually]

[Include a summary table for activity data of the category by GHG source or sink for the entire time series. Unlike emission tables, in the activity data table the years should be entered as row headers, and GHG sources or sinks as column headers (see the example below and adapt it as appropriate). Please, take into account that activity data are also included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 6-22.**

[Category]: activity data by GHG source or sink (activity data unit)

| ***Year*** | ***GHG source 1*** | ***GHG source 2*** | ***GHG source 3*** | ***GHG source 4*** | ***GHG source 5*** | ***GHG source N*** |
| --- | --- | --- | --- | --- | --- | --- |
| 1990 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1991 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1992 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1993 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1994 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1995 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1996 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1997 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1998 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1999 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2000 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2001 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2002 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2003 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2004 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2005 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2006 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2007 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2008 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2009 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2010 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2011 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2012 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2013 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2014 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2015 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2016 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2017 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2018 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2019 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2020 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2021 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2022 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the activity data]

* + - 1. **Emission factors applied in the category**

[Include a specific description of the emission factor sources (if taken from the *2006 IPCC Guidelines*, clearly indicate the table where they appear), assumptions used, rationale for choice of data, gaps and barriers, etc. In the case of country-specific emission factors, also indicate where they were obtained, the method used for obtaining them (literature, research, specific models, expert opinion, etc.), and the consistency with default emission factors of the *2006 IPCC Guidelines*]

[Include a summary table for emission factors used by GHG source or sink, especially country-specific emission factors (see the example below and adapt it as appropriate). Please, take into account that emission factors could also be included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 6-23.**

[Category]: emission factors applied by GHG source or sink

| ***GHG source or sink*** | ***GHG*** | ***Value*** | ***Unit*** |
| --- | --- | --- | --- |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the emission factors]

* + 1. **Description of any flexibility applied to the category**

MPG: provisions 4-6.

[Clearly indicate the provisions to which flexibility is applied, concisely clarify capacity constraints, noting that some constraints may be relevant to several provisions, and provide self-determined estimated time frames for improvements in relation to those capacity constraints]

[Include a table on the specific flexibility provisions applied. Please take into account that the illustrative example below is part of the **Flex\_Summary** spreadsheet of the CRT and, thus, the country may also quote it directly in this document]

**Table 6-24.**

[Category]: flexibility provisions applied

| ***MPG flexibility provision*** | ***Gas*** | ***Description of the application of flexibility*** | ***Clarification of capacity constraint*** | ***Time frame for improvement*** | ***Progress made in addressing areas of improvement*** |
| --- | --- | --- | --- | --- | --- |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |

Note:

Source: [], based on the **Flex\_Summary** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the flexibility applied]

* + 1. **Uncertainty assessment and time-series consistency of the category**

MPG: provisions 26, 27, 29 and 44. Provision 29 offers flexibility to countries that may need it.

[Include a specific description of the quantitative estimate and qualitative discussion of the uncertainty of the category by GHG and GHG source and sink for the starting year and the latest reporting year of the time series, indicate the main uncertainty sources (activity data or emission factors), include any other relevant qualitative description]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to uncertainty. If appropriate, include more detailed information on the uncertainty analysis of the category in Annex II and quote it in this section]

[Include a specific description of how the country ensured time-series consistency for each GHG source and sink of the category, describe gaps and barriers observed, and any data splicing technique applied. It would be appropriate to apply, at a minimum, the time-series consistency activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the time-series consistency]

* + 1. **Category-specific QA/QC and verification**

MPG: provisions 34, 35 and 46. Provisions 34 and 35 offer flexibility to countries that may need it.

[Include a specific description of quality assurance and quality control activities applied by the country for each GHG source or sink of the category. It would be appropriate to apply, at a minimum, the QA/QC activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to QA/QC activities. If appropriate, include more details on the category QA/QC activities in Annex IV]

* + 1. **Category-specific recalculations**

MPG: provisions 28 and 43.

[Include a specific description of the recalculations, indicating the justification for recalculations or any improvement made (in response to peer reviews, methodological changes, improved activity data, etc.), and the implications or effects these recalculations had on the GHG emission and removal trend of the category]

[Include a table on the implications or effects that the recalculations had on the GHG emission or removal trend of the category (see illustrative example below). Please take into account that the table is adapted from the **Table8s1** spreadsheet of the CRT and, thus, the country may quote the CRT directly in this document]

**Table 6-25.**

[Category]: comparison between previous inventory and current inventory (kt CO2 eq)

| ***NGI*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Previous NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Current NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Difference | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Difference % | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% |  |  |
| **Total effect net %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |

Note:

Source: [], based on the **Table8s1** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the recalculations]

* + 1. **Category-specific planned improvements**

MPG: provision 7.

[Include a specific description of the activities applied, in the process of being applied, or planned to improve the quality of the category (methods, activity data, emission factors, etc.), including, in particular, monitoring of activities detected by peer review processes or other review processes or previous analyses. It would probably be appropriate to include a table to systematize improvement activities. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the improvement plan]

* 1. **Settlements (CRT 4.E)**
     1. **Description and trend of GHGs in the category**

MPG: provisions 47, 48, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

[Include a theoretical description of the category, its subcategories, GHG sources and sinks pursuant to the *2006 IPCC Guidelines* only if deemed relevant. In addition, include a practical description of the category in the country, indicating what subcategories, GHG sources and sinks are present, their relevance at the national level and a completeness summary]

[Include a description of the category's GHGs, in kt CO2 eq, and an explanation on: (1) percentage contribution of the category to the sector's total net emissions in the latest inventory year and its percentage change over time; (2) emissions of the latest inventory year, and their key drivers; (3) percentage contribution of each subcategory in the latest inventory year; (4) variation between the base year and the latest inventory year, and its key drivers; (5) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (6) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total net GHG of the category by subcategory, GHG source or sink (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 6-26.**

[Category]: total net GHG by subcategory (kt CO2 eq)

| ***Subcategory*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total net** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of total net GHG of the category by subcategory (in kt CO2 eq), 1990-2022]

**Figure 6-9.**

[Category]: total net GHG by subcategory (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the category or subcategories or its GHG sources or sinks]

* + 1. **Methodological issues of the category**

MPG: provisions 17, 20-24, 39 and 40.

[Include a specific description of the methods and methodological tiers applied in the category, describe or specify equations applied and their direct reference to the *2006 IPCC Guidelines* or other guidelines used by the country. In addition, it would be appropriate to specify the tools used for the calculation of GHGs. This information may be a repetition of the general methodological issues of the category. If this is the case, quote the relevant section]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of this category. If appropriate, include more detailed information on the methodological issues of the category in Annex V.IV]

* + - 1. **Specific activity data of the category**

[Include a specific description of the activity data sources, assumptions used, data splicing techniques, rationale for choice of data, gaps and barriers, handling of restricted data and confidentiality, etc. If activity data sources are different for each GHG source or sink, add a paragraph explaining each source individually]

[Include a summary table for activity data of the category by GHG source or sink for the entire time series. Unlike emission tables, in the activity data table the years should be entered as row headers, and GHG sources or sinks as column headers (see the example below and adapt it as appropriate). Please, take into account that activity data are also included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 6-27.**

[Category]: activity data by GHG source or sink (activity data unit)

| ***Year*** | ***GHG source 1*** | ***GHG source 2*** | ***GHG source 3*** | ***GHG source 4*** | ***GHG source 5*** | ***GHG source N*** |
| --- | --- | --- | --- | --- | --- | --- |
| 1990 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1991 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1992 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1993 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1994 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1995 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1996 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1997 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1998 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1999 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2000 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2001 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2002 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2003 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2004 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2005 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2006 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2007 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2008 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2009 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2010 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2011 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2012 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2013 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2014 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2015 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2016 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2017 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2018 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2019 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2020 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2021 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2022 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the activity data]

* + - 1. **Emission factors applied in the category**

[Include a specific description of the emission factor sources (if taken from the *2006 IPCC Guidelines*, clearly indicate the table where they appear), assumptions used, rationale for choice of data, gaps and barriers, etc. In the case of country-specific emission factors, also indicate where they were obtained, the method used for obtaining them (literature, research, specific models, expert opinion, etc.), and the consistency with default emission factors of the *2006 IPCC Guidelines*]

[Include a summary table for emission factors used by GHG source or sink, especially country-specific emission factors (see the example below and adapt it as appropriate). Please, take into account that emission factors could also be included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 6-28.**

[Category]: emission factors applied by GHG source or sink

| ***GHG source or sink*** | ***GHG*** | ***Value*** | ***Unit*** |
| --- | --- | --- | --- |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the emission factors]

* + 1. **Description of any flexibility applied to the category**

MPG: provisions 4-6.

[Clearly indicate the provisions to which flexibility is applied, concisely clarify capacity constraints, noting that some constraints may be relevant to several provisions, and provide self-determined estimated time frames for improvements in relation to those capacity constraints]

[Include a table on the specific flexibility provisions applied. Please take into account that the illustrative example below is part of the **Flex\_Summary** spreadsheet of the CRT and, thus, the country may also quote it directly in this document]

**Table 6-29.**

[Category]: flexibility provisions applied

| ***MPG flexibility provision*** | ***Gas*** | ***Description of the application of flexibility*** | ***Clarification of capacity constraint*** | ***Time frame for improvement*** | ***Progress made in addressing areas of improvement*** |
| --- | --- | --- | --- | --- | --- |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |

Note:

Source: [], based on the **Flex\_Summary** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the flexibility applied]

* + 1. **Uncertainty assessment and time-series consistency of the category**

MPG: provisions 26, 27, 29 and 44. Provision 29 offers flexibility to countries that may need it.

[Include a specific description of the quantitative estimate and qualitative discussion of the uncertainty of the category by GHG and GHG source and sink for the starting year and the latest reporting year of the time series, indicate the main uncertainty sources (activity data or emission factors), include any other relevant qualitative description]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to uncertainty. If appropriate, include more detailed information on the uncertainty analysis of the category in Annex II and quote it in this section]

[Include a specific description of how the country ensured time-series consistency for each GHG source and sink of the category, describe gaps and barriers observed, and any data splicing technique applied. It would be appropriate to apply, at a minimum, the time-series consistency activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the time-series consistency]

* + 1. **Category-specific QA/QC and verification**

MPG: provisions 34, 35 and 46. Provisions 34 and 35 offer flexibility to countries that may need it.

[Include a specific description of quality assurance and quality control activities applied by the country for each GHG source or sink of the category. It would be appropriate to apply, at a minimum, the QA/QC activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to QA/QC activities. If appropriate, include more details on the category QA/QC activities in Annex IV]

* + 1. **Category-specific recalculations**

MPG: provisions 28 and 43.

[Include a specific description of the recalculations, indicating the justification for recalculations or any improvement made (in response to peer reviews, methodological changes, improved activity data, etc.), and the implications or effects these recalculations had on the GHG emission and removal trend of the category]

[Include a table on the implications or effects that the recalculations had on the GHG emission or removal trend of the category (see illustrative example below). Please take into account that the table is adapted from the **Table8s1** spreadsheet of the CRT and, thus, the country may quote the CRT directly in this document]

**Table 6-30.**

[Category]: comparison between previous inventory and current inventory (kt CO2 eq)

| ***NGI*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Previous NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Current NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Difference | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Difference % | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% |  |  |
| **Total effect net %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |

Note:

Source: [], based on the **Table8s1** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the recalculations]

* + 1. **Category-specific planned improvements**

MPG: provision 7.

[Include a specific description of the activities applied, in the process of being applied, or planned to improve the quality of the category (methods, activity data, emission factors, etc.), including, in particular, monitoring of activities detected by peer review processes or other review processes or previous analyses. It would probably be appropriate to include a table to systematize improvement activities. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the improvement plan]

* 1. **Other land (CRT 4.F)**
     1. **Description and trend of GHGs in the category**

MPG: provisions 47, 48, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

[Include a theoretical description of the category, its subcategories, GHG sources and sinks pursuant to the *2006 IPCC Guidelines* only if deemed relevant. In addition, include a practical description of the category in the country, indicating what subcategories, GHG sources and sinks are present, their relevance at the national level and a completeness summary]

[Include a description of the category's GHGs, in kt CO2 eq, and an explanation on: (1) percentage contribution of the category to the sector's total net emissions in the latest inventory year and its percentage change over time; (2) emissions of the latest inventory year, and their key drivers; (3) percentage contribution of each subcategory in the latest inventory year; (4) variation between the base year and the latest inventory year, and its key drivers; (5) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (6) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total net GHG of the category by subcategory, GHG source or sink (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 6-31.**

[Category]: total net GHG by subcategory (kt CO2 eq)

| ***Subcategory*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total net** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of total net GHG of the category by subcategory (in kt CO2 eq), 1990-2022]

**Figure 6-10.**

[Category]: total net GHG by subcategory (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the category or subcategories or its GHG sources or sinks]

* + 1. **Methodological issues of the category**

MPG: provisions 17, 20-24, 39 and 40.

[Include a specific description of the methods and methodological tiers applied in the category, describe or specify equations applied and their direct reference to the *2006 IPCC Guidelines* or other guidelines used by the country. In addition, it would be appropriate to specify the tools used for the calculation of GHGs. This information may be a repetition of the general methodological issues of the category. If this is the case, quote the relevant section]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of this category. If appropriate, include more detailed information on the methodological issues of the category in Annex V.IV]

* + - 1. **Specific activity data of the category**

[Include a specific description of the activity data sources, assumptions used, data splicing techniques, rationale for choice of data, gaps and barriers, handling of restricted data and confidentiality, etc. If activity data sources are different for each GHG source or sink, add a paragraph explaining each source individually]

[Include a summary table for activity data of the category by GHG source or sink for the entire time series. Unlike emission tables, in the activity data table the years should be entered as row headers, and GHG sources or sinks as column headers (see the example below and adapt it as appropriate). Please, take into account that activity data are also included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 6-32.**

[Category]: activity data by GHG source or sink (activity data unit)

| ***Year*** | ***GHG source 1*** | ***GHG source 2*** | ***GHG source 3*** | ***GHG source 4*** | ***GHG source 5*** | ***GHG source N*** |
| --- | --- | --- | --- | --- | --- | --- |
| 1990 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1991 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1992 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1993 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1994 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1995 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1996 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1997 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1998 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1999 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2000 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2001 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2002 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2003 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2004 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2005 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2006 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2007 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2008 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2009 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2010 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2011 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2012 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2013 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2014 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2015 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2016 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2017 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2018 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2019 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2020 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2021 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2022 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the activity data]

* + - 1. **Emission factors applied in the category**

[Include a specific description of the emission factor sources (if taken from the *2006 IPCC Guidelines*, clearly indicate the table where they appear), assumptions used, rationale for choice of data, gaps and barriers, etc. In the case of country-specific emission factors, also indicate where they were obtained, the method used for obtaining them (literature, research, specific models, expert opinion, etc.), and the consistency with default emission factors of the *2006 IPCC Guidelines*]

[Include a summary table for emission factors used by GHG source or sink, especially country-specific emission factors (see the example below and adapt it as appropriate). Please, take into account that emission factors could also be included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 6-33.**

[Category]: emission factors applied by GHG source or sink

| ***GHG source or sink*** | ***GHG*** | ***Value*** | ***Unit*** |
| --- | --- | --- | --- |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the emission factors]

* + 1. **Description of any flexibility applied to the category**

MPG: provisions 4-6.

[Clearly indicate the provisions to which flexibility is applied, concisely clarify capacity constraints, noting that some constraints may be relevant to several provisions, and provide self-determined estimated time frames for improvements in relation to those capacity constraints]

[Include a table on the specific flexibility provisions applied. Please take into account that the illustrative example below is part of the **Flex\_Summary** spreadsheet of the CRT and, thus, the country may also quote it directly in this document]

**Table 6-34.**

[Category]: flexibility provisions applied

| ***MPG flexibility provision*** | ***Gas*** | ***Description of the application of flexibility*** | ***Clarification of capacity constraint*** | ***Time frame for improvement*** | ***Progress made in addressing areas of improvement*** |
| --- | --- | --- | --- | --- | --- |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |

Note:

Source: [], based on the **Flex\_Summary** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the flexibility applied]

* + 1. **Uncertainty assessment and time-series consistency of the category**

MPG: provisions 26, 27, 29 and 44. Provision 29 offers flexibility to countries that may need it.

[Include a specific description of the quantitative estimate and qualitative discussion of the uncertainty of the category by GHG and GHG source and sink for the starting year and the latest reporting year of the time series, indicate the main uncertainty sources (activity data or emission factors), include any other relevant qualitative description]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to uncertainty. If appropriate, include more detailed information on the uncertainty analysis of the category in Annex II and quote it in this section]

[Include a specific description of how the country ensured time-series consistency for each GHG source and sink of the category, describe gaps and barriers observed, and any data splicing technique applied. It would be appropriate to apply, at a minimum, the time-series consistency activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the time-series consistency]

* + 1. **Category-specific QA/QC and verification**

MPG: provisions 34, 35 and 46. Provisions 34 and 35 offer flexibility to countries that may need it.

[Include a specific description of quality assurance and quality control activities applied by the country for each GHG source or sink of the category. It would be appropriate to apply, at a minimum, the QA/QC activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to QA/QC activities. If appropriate, include more details on the category QA/QC activities in Annex IV]

* + 1. **Category-specific recalculations**

MPG: provisions 28 and 43.

[Include a specific description of the recalculations, indicating the justification for recalculations or any improvement made (in response to peer reviews, methodological changes, improved activity data, etc.), and the implications or effects these recalculations had on the GHG emission and removal trend of the category]

[Include a table on the implications or effects that the recalculations had on the GHG emission or removal trend of the category (see illustrative example below). Please take into account that the table is adapted from the **Table8s1** spreadsheet of the CRT and, thus, the country may quote the CRT directly in this document]

**Table 6-35.**

[Category]: comparison between previous inventory and current inventory (kt CO2 eq)

| ***NGI*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Previous NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Current NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Difference | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Difference % | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% |  |  |
| **Total effect net %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |

Note:

Source: [], based on the **Table8s1** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the recalculations]

* + 1. **Category-specific planned improvements**

MPG: provision 7.

[Include a specific description of the activities applied, in the process of being applied, or planned to improve the quality of the category (methods, activity data, emission factors, etc.), including, in particular, monitoring of activities detected by peer review processes or other review processes or previous analyses. It would probably be appropriate to include a table to systematize improvement activities. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the improvement plan]

* 1. **Harvested wood products (CRT 4.G)**

MPG: provision 56.

* + 1. **Description and trend of GHGs in the category**

MPG: provisions 47, 48, 56, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

[Include a theoretical description of the category, its subcategories, GHG sources and sinks pursuant to the *2006 IPCC Guidelines* only if deemed relevant. In addition, include a practical description of the category in the country, indicating what subcategories, GHG sources and sinks are present, their relevance at the national level and a completeness summary]

[Include a description of the category's GHGs, in kt CO2 eq, and an explanation on: (1) percentage contribution of the category to the sector's total net emissions in the latest inventory year and its percentage change over time; (2) emissions of the latest inventory year, and their key drivers; (3) percentage contribution of each subcategory in the latest inventory year; (4) variation between the base year and the latest inventory year, and its key drivers; (5) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (6) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total net GHG of the category by subcategory, GHG source or sink (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 6-36.**

[Category]: total net GHG by subcategory (kt CO2 eq)

| ***Subcategory*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total net** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of total net GHG of the category by subcategory (in kt CO2 eq), 1990-2022]

**Figure 6-11.**

[Category]: total net GHG by subcategory (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the category or subcategories or its GHG sources or sinks]

* + 1. **Methodological issues of the category**

MPG: provisions 17, 20-24, 39 and 40.

[Include a specific description of the methods and methodological tiers applied in the category, describe or specify equations applied and their direct reference to the *2006 IPCC Guidelines* or other guidelines used by the country. In addition, it would be appropriate to specify the tools used for the calculation of GHGs. This information may be a repetition of the general methodological issues of the category. If this is the case, quote the relevant section]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of this category. If appropriate, include more detailed information on the methodological issues of the category in Annex V.IV]

* + - 1. **Specific activity data of the category**

[Include a specific description of the activity data sources, assumptions used, data splicing techniques, rationale for choice of data, gaps and barriers, handling of restricted data and confidentiality, etc. If activity data sources are different for each GHG source or sink, add a paragraph explaining each source individually]

[Include a summary table for activity data of the category by GHG source or sink for the entire time series. Unlike emission tables, in the activity data table the years should be entered as row headers, and GHG sources or sinks as column headers (see the example below and adapt it as appropriate). Please, take into account that activity data are also included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 6-37.**

[Category]: activity data by GHG source or sink (activity data unit)

| ***Year*** | ***GHG source 1*** | ***GHG source 2*** | ***GHG source 3*** | ***GHG source 4*** | ***GHG source 5*** | ***GHG source N*** |
| --- | --- | --- | --- | --- | --- | --- |
| 1990 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1991 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1992 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1993 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1994 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1995 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1996 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1997 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1998 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1999 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2000 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2001 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2002 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2003 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2004 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2005 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2006 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2007 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2008 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2009 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2010 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2011 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2012 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2013 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2014 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2015 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2016 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2017 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2018 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2019 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2020 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2021 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2022 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the activity data]

* + - 1. **Emission factors applied in the category**

[Include a specific description of the emission factor sources (if taken from the *2006 IPCC Guidelines*, clearly indicate the table where they appear), assumptions used, rationale for choice of data, gaps and barriers, etc. In the case of country-specific emission factors, also indicate where they were obtained, the method used for obtaining them (literature, research, specific models, expert opinion, etc.), and the consistency with default emission factors of the *2006 IPCC Guidelines*]

[Include a summary table for emission factors used by GHG source or sink, especially country-specific emission factors (see the example below and adapt it as appropriate). Please, take into account that emission factors could also be included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 6-38.**

[Category]: emission factors applied by GHG source or sink

| ***GHG source or sink*** | ***GHG*** | ***Value*** | ***Unit*** |
| --- | --- | --- | --- |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the emission factors]

* + 1. **Description of any flexibility applied to the category**

MPG: provisions 4-6.

[Clearly indicate the provisions to which flexibility is applied, concisely clarify capacity constraints, noting that some constraints may be relevant to several provisions, and provide self-determined estimated time frames for improvements in relation to those capacity constraints]

[Include a table on the specific flexibility provisions applied. Please take into account that the illustrative example below is part of the **Flex\_Summary** spreadsheet of the CRT and, thus, the country may also quote it directly in this document]

**Table 6-45.**

[Category]: flexibility provisions applied

| ***MPG flexibility provision*** | ***Gas*** | ***Description of the application of flexibility*** | ***Clarification of capacity constraint*** | ***Time frame for improvement*** | ***Progress made in addressing areas of improvement*** |
| --- | --- | --- | --- | --- | --- |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |

Note:

Source: [], based on the **Flex\_Summary** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the flexibility applied]

* + 1. **Uncertainty assessment and time-series consistency of the category**

MPG: provisions 26, 27, 29 and 44. Provision 29 offers flexibility to countries that may need it.

[Include a specific description of the quantitative estimate and qualitative discussion of the uncertainty of the category by GHG and GHG source and sink for the starting year and the latest reporting year of the time series, indicate the main uncertainty sources (activity data or emission factors), include any other relevant qualitative description]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to uncertainty. If appropriate, include more detailed information on the uncertainty analysis of the category in Annex II and quote it in this section]

[Include a specific description of how the country ensured time-series consistency for each GHG source and sink of the category, describe gaps and barriers observed, and any data splicing technique applied. It would be appropriate to apply, at a minimum, the time-series consistency activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the time-series consistency]

* + 1. **Category-specific QA/QC and verification**

MPG: provisions 34, 35 and 46. Provisions 34 and 35 offer flexibility to countries that may need it.

[Include a specific description of quality assurance and quality control activities applied by the country for each GHG source or sink of the category. It would be appropriate to apply, at a minimum, the QA/QC activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to QA/QC activities. If appropriate, include more details on the category QA/QC activities in Annex IV]

* + 1. **Category-specific recalculations**

MPG: provisions 28 and 43.

[Include a specific description of the recalculations, indicating the justification for recalculations or any improvement made (in response to peer reviews, methodological changes, improved activity data, etc.), and the implications or effects these recalculations had on the GHG emission and removal trend of the category]

[Include a table on the implications or effects that the recalculations had on the GHG emission or removal trend of the category (see illustrative example below). Please take into account that the table is adapted from the **Table8s1** spreadsheet of the CRT and, thus, the country may quote the CRT directly in this document]

**Table 6-40.**

[Category]: comparison between previous inventory and current inventory (kt CO2 eq)

| ***NGI*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Previous NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Current NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Difference | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Difference % | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% |  |  |
| **Total effect net %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |

Note:

Source: [], based on the **Table8s1** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the recalculations]

* + 1. **Category-specific planned improvements**

MPG: provision 7.

[Include a specific description of the activities applied, in the process of being applied, or planned to improve the quality of the category (methods, activity data, emission factors, etc.), including, in particular, monitoring of activities detected by peer review processes or other review processes or previous analyses. It would probably be appropriate to include a table to systematize improvement activities. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the improvement plan]

* 1. **Other (specify) (CRT 4.H)**

[Only if applicable]

1. **WASTE (CRT 5)**
   1. **Overview of the sector**

MPG: provisions 47, 48, 50, 51, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

* + 1. **Description of the sector**

[Include a theoretical description of the sector, its categories or GHG sources pursuant to the *2006 IPCC Guidelines* only if deemed relevant. In addition, include a practical description of the sector in the country, indicating what categories or GHG sources are present, their relevance at the national level and a completeness summary]

* + 1. **Trend in the sector's GHG**

[Include the sector's report table for the latest inventory year by categories and subcategories, and an explanation on emissions by each GHG and precursor gas in the total emissions for the sector (kt for each GHG and precursor)]

**Table 7-1.**

Waste sector: emissions by GHG, category and subcategory (kt) for [latest inventory year]

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Code*** | ***GHG source categories*** | ***CO2***  ***(kt)*** | ***CH4***  ***(kt)*** | ***N2O***  ***(kt)*** | ***NOx***  ***(kt)*** | ***CO***  ***(kt)*** | ***NMVOC*** ***(kt)*** | ***SOX***  ***(kt)*** | ***Total GHG***  ***(kt CO2 eq)*** |
| **5.** | **Waste** |  |  |  |  |  |  |  |  |
| 5.A. | Solid waste disposal |  |  |  |  |  |  |  |  |
| 5.A.1. | Managed waste disposal sites |  |  |  |  |  |  |  |  |
| 5.A.2. | Unmanaged waste disposal sites |  |  |  |  |  |  |  |  |
| 5.A.3. | Uncategorized waste disposal sites |  |  |  |  |  |  |  |  |
| 5.B. | Biological treatment of solid waste |  |  |  |  |  |  |  |  |
| 5.B.1. | Composting |  |  |  |  |  |  |  |  |
| 5.B.2. | Anaerobic digestion at biogas facilities |  |  |  |  |  |  |  |  |
| 5.C. | Incineration and open burning of waste |  |  |  |  |  |  |  |  |
| 5.C.1. | Waste incineration |  |  |  |  |  |  |  |  |
| 5.C.2. | Open burning of waste |  |  |  |  |  |  |  |  |
| 5.D. | Wastewater treatment and discharge |  |  |  |  |  |  |  |  |
| 5.D.1. | Domestic wastewater |  |  |  |  |  |  |  |  |
| 5.D.2. | Industrial wastewater |  |  |  |  |  |  |  |  |
| 5.D.3. | Other (please specify) |  |  |  |  |  |  |  |  |
| 5.E. | Other (please specify) |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | ***Memo items*** |  |  |  |  |  |  |  |  |
| 5.F.1. | Long-term storage of C in waste disposal sites |  |  |  |  |  |  |  |  |
| 5.F.1.a. | Annual change in total long-term C storage |  |  |  |  |  |  |  |  |
| 5.F.1.b. | Annual change in total long-term C storage in HWP waste |  |  |  |  |  |  |  |  |

Note: Use the following notation keys where numerical data are not available: NA = not applicable; NE = not estimated; NO = not occurring; IE = included elsewhere; C = confidential.

Source: [], based on the **Table5** spreadsheet of the CRT.

[Include a description of the sector's GHGs, in kt CO2 eq, and an explanation on: (1) percentage contribution of the sector to national total emissions and national total net emissions in the latest inventory year and its percentage change over time; (2) emissions of the latest inventory year, and their key drivers; (3) percentage contribution of each category or subcategory in the latest inventory year; (4) variation between the base year and the latest inventory year, and its key drivers; (5) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (6) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total GHG emissions of the sector inventory by category or subcategory (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 7-2.**

Waste sector: total GHG emissions by category (kt CO2 eq)

| ***Category*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source: [], based on the **Table10s1** spreadsheet of the CRT.

[Include a summary figure of total GHG emissions of the sector inventory by category or subcategory (in kt CO2 eq), 1990-2022]

**Figure 7-1.**

Waste sector: total GHG emissions by category or subcategory (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the sector trend]

[Include a description of each GHG (CO2, CH4 and N2O), in kt CO2 eq, and an explanation on: (1) emissions by GHG of the latest inventory year, and their key drivers; (2) percentage contribution of each GHG in the latest inventory year; (3) variation between the base year and the latest inventory year by GHG, and its key drivers; (4) variation compared to the latest inventory year of the previous inventory by GHG, and its key drivers; and (5) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year by GHG, and its key drivers]

[Include a summary table on each GHG of the sector inventory. At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 7-3.**

Waste sector: emissions by GHG (kt CO2 eq)

| ***GHG*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| CO2 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| CH4 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| N2O | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of each GHG of the sector inventory (kt CO2 eq), 1990-2022]

**Figure 7-2.**

Waste sector: emissions by GHG (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the GHG trend in the sector inventory by GHG]

[Include a very brief description of each precursor (NOx, CO, NMVOC and SOX), and an explanation on: (1) emissions by precursor of the latest inventory year, and their key drivers; (2) percentage contribution of each precursor in the latest inventory year; (3) variation between the base year and the latest inventory year by precursor, and its key drivers; (4) variation compared to the latest inventory year of the previous inventory by precursor, and its key drivers; and (5) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year by precursor, and its key drivers]

[Include a summary table on each precursor of the sector inventory. At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 7-4.**

Waste sector: emissions by precursor (kt)

| ***Precursor*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| NOx | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| CO | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| NMVOC | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| SOX | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of each precursor of the sector inventory (kt), 1990-2022]

**Figure 7-3.**

Waste sector: emissions by precursor (kt), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the precursor trend in the sector inventory by precursor]

[If appropriate, include a very brief description of each of the other substances that have an impact on climate (for example, carbon black emissions, tropospheric ozone, particulate matter, other short-lived climate pollutants, etc.), in kt, and an explanation on: (1) emissions by other substances of the latest inventory year, and their key drivers; (2) percentage contribution of other substances in the latest inventory year; (3) variation between the base year and the latest inventory year for other substances, and its key drivers; (4) variation compared to the latest inventory year of the previous inventory for other substances, and its key drivers; and (5) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year for other substances, and its key drivers]

[Include, if appropriate, a summary table on each of the other substances that have an impact on climate of the sector inventory. At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 7-5.**

Waste sector: emissions of other substances that have an impact on climate (kt)

| ***Substance*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include, if appropriate, a figure summary on each of the other substances that have an impact on climate of the sector inventory (kt), 1990-2022]

**Figure 7-4.**

Waste sector: emissions of other substances that have an impact on climate (kt), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include, if appropriate, any conclusion or relevant aspect that the country may want to highlight pertaining to the trend in other substances that have an impact on climate of the sector inventory by substance]

* + 1. **General methodological issues of the sector**

MPG: provisions 17, 20-24, 39 and 40.

[Include a very general description of methods and methodological tiers applied, and tools used to calculate GHGs, precursor gases, and, if appropriate, other substances that have an impact on climate (for example, carbon black)]

[If a country is unable to adopt a higher tier method for a specific key category due to lack of resources, the country can use a tier 1 approach. In such cases, the country should clearly document why the methodological choice was not in line with the corresponding decision tree of the *2006 IPCC Guidelines*]

[Include a very general description of the activity data sources for the sector]

[Include a very general description of the emission factor sources. For country-specific emission factors, indicate where they were obtained and which of the subsequent sections provides more information]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of the sector. If appropriate, include more detailed information on the methodological issues of the sector in Annex V.V. In the case of other substances that have an impact on climate (for example, carbon black), include details on its methodological issues in Annex V.VI]

* 1. **Solid waste disposal (CRT 5.A)**
     1. **Description and trend of GHGs in the category**

MPG: provisions 47, 48, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

[Include a theoretical description of the category and its subcategories or GHG sources pursuant to the *2006 IPCC Guidelines* only if deemed relevant. In addition, include a practical description of the category in the country, indicating what subcategories or GHG sources are present, their relevance at the national level and a completeness summary]

[Include a description of the category's GHGs, in kt CO2 eq, and an explanation on: (1) percentage contribution of the category to the sector's total emissions in the latest inventory year and its percentage change over time; (2) emissions of the latest inventory year, and their key drivers; (3) percentage contribution of each GHG source in the latest inventory year; (4) variation between the base year and the latest inventory year, and its key drivers; (5) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (6) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total GHG emissions of the category by GHG source (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 7-6.**

[Category]: total GHG emissions by subcategory (kt CO2 eq)

| ***Subcategory*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of total GHG emissions of the category by GHG source (in kt CO2 eq), 1990-2022]

**Figure 7-5.**

[Category]: total GHG emissions by source (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the category or subcategory or its GHG sources]

* + 1. **Methodological issues of the category**

MPG: provisions 17, 20-24, 39 and 40.

[Include a specific description of the methods and methodological tiers applied in the category, describe or specify equations applied and their direct reference to the *2006 IPCC Guidelines* or other guidelines used by the country. In addition, it would be appropriate to specify the tools used for the calculation of GHGs. This information may be a repetition of the general methodological issues of the category. If this is the case, quote the relevant section]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of this category. If appropriate, include more detailed information on the methodological issues of the category in Annex V.V]

* + - 1. **Activity data of the category**

[Include a specific description of the activity data sources, assumptions used, data splicing techniques, rationale for choice of data, gaps and barriers, handling of restricted data and confidentiality, etc. If activity data sources are different for each GHG source, add a paragraph explaining each source individually]

[Include a summary table for activity data of the category by GHG source for the entire time series. Unlike emission tables, in the activity data table the years should be entered as row headers, and GHG sources as column headers (see the example below and adapt it as appropriate). Please, take into account that activity data are also included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 7-7.**

[Category]: activity data by GHG source (activity data unit)

| ***Year*** | ***GHG source 1*** | ***GHG source 2*** | ***GHG source 3*** | ***GHG source 4*** | ***GHG source 5*** | ***GHG source N*** |
| --- | --- | --- | --- | --- | --- | --- |
| 1990 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1991 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1992 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1993 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1994 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1995 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1996 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1997 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1998 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1999 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2000 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2001 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2002 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2003 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2004 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2005 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2006 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2007 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2008 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2009 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2010 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2011 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2012 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2013 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2014 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2015 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2016 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2017 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2018 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2019 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2020 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2021 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2022 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the activity data]

* + - 1. **Emission factors applied in the category**

[Include a specific description of the emission factor sources (if taken from the *2006 IPCC Guidelines*, clearly indicate the table where they appear), assumptions used, rationale for choice of data, gaps and barriers, etc. In the case of country-specific emission factors, also indicate where they were obtained, the method used for obtaining them (literature, research, specific models, expert opinion, etc.), and the consistency with default emission factors of the *2006 IPCC Guidelines*]

[Include a summary table for emission factors used by GHG source, especially country-specific emission factors (see the example below and adapt it as appropriate). Please, take into account that emission factors could also be included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 7-8.**

[Category]: emission factors applied by GHG source

| ***GHG source*** | ***GHG*** | ***Value*** | ***Unit*** |
| --- | --- | --- | --- |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the emission factors]

* + 1. **Description of any flexibility applied to the category**

MPG: provisions 4-6.

[Clearly indicate the provisions to which flexibility is applied, concisely clarify capacity constraints, noting that some constraints may be relevant to several provisions, and provide self-determined estimated time frames for improvements in relation to those capacity constraints]

[Include a table on the specific flexibility provisions applied. Please take into account that the illustrative example below is part of the **Flex\_Summary** spreadsheet of the CRT and, thus, the country may also quote it directly in this document]

**Table 7-9.**

[Category]: flexibility provisions applied

| ***MPG flexibility provision*** | ***Gas*** | ***Description of the application of flexibility*** | ***Clarification of capacity constraint*** | ***Time frame for improvement*** | ***Progress made in addressing areas of improvement*** |
| --- | --- | --- | --- | --- | --- |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |

Note:

Source: [], based on the **Flex\_Summary** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the flexibility applied]

* + 1. **Uncertainty assessment and time-series consistency of the category**

MPG: provisions 26, 27, 29 and 44. Provision 29 offers flexibility to countries that may need it.

[Include a specific description of the quantitative estimate and qualitative discussion of the uncertainty of the category by GHG and GHG source for the starting year and the latest reporting year of the time series, indicate the main uncertainty sources (activity data or emission factors), include any other relevant qualitative description]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to uncertainty. If appropriate, include more detailed information on the uncertainty analysis of the category in Annex II and quote it in this section]

[Include a specific description of how the country ensured time-series consistency for each GHG source of the category, describe gaps and barriers observed, and any data splicing technique applied. It would be appropriate to apply, at a minimum, the time-series consistency activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the time-series consistency]

* + 1. **Category-specific QA/QC and verification**

MPG: provisions 34, 35 and 46. Provisions 34 and 35 offer flexibility to countries that may need it.

[Include a specific description of quality assurance and quality control activities applied by the country for each GHG source of the category. It would be appropriate to apply, at a minimum, the QA/QC activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to QA/QC activities. If appropriate, include more details on the category QA/QC activities in Annex IV]

* + 1. **Category-specific recalculations**

MPG: provisions 28 and 43.

[Include a specific description of the recalculations, indicating the justification for recalculations or any improvement made (in response to peer reviews, methodological changes, improved activity data, etc.), and the implications or effects these recalculations had on the GHG emission trend of the category]

[Include a table on the implications or effects that the recalculations had on the GHG emission trend of the category (see illustrative example below). Please take into account that the table is adapted from the **Table8s1** spreadsheet of the CRT and, thus, the country may quote the CRT directly in this document]

**Table 7-10.**

[Category]: comparison between previous inventory and current inventory (kt CO2 eq)

| ***NGI*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Previous NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Current NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Difference | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Difference % | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% |  |  |
| **Total effect %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |
| **Total effect net %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |

Note:

Source: [], based on the **Table8s1** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the recalculations]

* + 1. **Category-specific planned improvements**

MPG: provision 7.

[Include a specific description of the activities applied, in the process of being applied, or planned to improve the quality of the category (methods, activity data, emission factors, etc.), including, in particular, monitoring of activities detected by peer review processes or other review processes or previous analyses. It would probably be appropriate to include a table to systematize improvement activities. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the improvement plan]

* 1. **Biological treatment of solid waste (CRT 5.B)**
     1. **Description and trend of GHGs in the category**

MPG: provisions 47, 48, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

[Include a theoretical description of the category and its subcategories or GHG sources pursuant to the *2006 IPCC Guidelines* only if deemed relevant. In addition, include a practical description of the category in the country, indicating what subcategories or GHG sources are present, their relevance at the national level and a completeness summary]

[Include a description of the category's GHGs, in kt CO2 eq, and an explanation on: (1) percentage contribution of the category to the sector's total emissions in the latest inventory year and its percentage change over time; (2) emissions of the latest inventory year, and their key drivers; (3) percentage contribution of each GHG source in the latest inventory year; (4) variation between the base year and the latest inventory year, and its key drivers; (5) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (6) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total GHG emissions of the category by GHG source (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 7-11.**

[Category]: total GHG emissions by subcategory (kt CO2 eq)

| ***Subcategory*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of total GHG emissions of the category by GHG source (in kt CO2 eq), 1990-2022]

**Figure 7-6.**

[Category]: total GHG emissions by source (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the category or subcategory or its GHG sources]

* + 1. **Methodological issues of the category**

MPG: provisions 17, 20-24, 39 and 40.

[Include a specific description of the methods and methodological tiers applied in the category, describe or specify equations applied and their direct reference to the *2006 IPCC Guidelines* or other guidelines used by the country. In addition, it would be appropriate to specify the tools used for the calculation of GHGs. This information may be a repetition of the general methodological issues of the category. If this is the case, quote the relevant section]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of this category. If appropriate, include more detailed information on the methodological issues of the category in Annex V.V]

* + - 1. **Activity data of the category**

[Include a specific description of the activity data sources, assumptions used, data splicing techniques, rationale for choice of data, gaps and barriers, handling of restricted data and confidentiality, etc. If activity data sources are different for each GHG source, add a paragraph explaining each source individually]

[Include a summary table for activity data of the category by GHG source for the entire time series. Unlike emission tables, in the activity data table the years should be entered as row headers, and GHG sources as column headers (see the example below and adapt it as appropriate). Please, take into account that activity data are also included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 7-12.**

[Category]: activity data by GHG source (activity data unit)

| ***Year*** | ***GHG source 1*** | ***GHG source 2*** | ***GHG source 3*** | ***GHG source 4*** | ***GHG source 5*** | ***GHG source N*** |
| --- | --- | --- | --- | --- | --- | --- |
| 1990 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1991 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1992 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1993 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1994 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1995 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1996 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1997 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1998 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1999 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2000 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2001 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2002 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2003 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2004 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2005 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2006 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2007 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2008 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2009 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2010 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2011 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2012 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2013 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2014 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2015 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2016 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2017 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2018 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2019 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2020 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2021 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2022 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the activity data]

* + - 1. **Emission factors applied in the category**

[Include a specific description of the emission factor sources (if taken from the *2006 IPCC Guidelines*, clearly indicate the table where they appear), assumptions used, rationale for choice of data, gaps and barriers, etc. In the case of country-specific emission factors, also indicate where they were obtained, the method used for obtaining them (literature, research, specific models, expert opinion, etc.), and the consistency with default emission factors of the *2006 IPCC Guidelines*]

[Include a summary table for emission factors used by GHG source, especially country-specific emission factors (see the example below and adapt it as appropriate). Please, take into account that emission factors could also be included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 7-13.**

[Category]: emission factors applied by GHG source

| ***GHG source*** | ***GHG*** | ***Value*** | ***Unit*** |
| --- | --- | --- | --- |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the emission factors]

* + 1. **Description of any flexibility applied to the category**

MPG: provisions 4-6.

[Clearly indicate the provisions to which flexibility is applied, concisely clarify capacity constraints, noting that some constraints may be relevant to several provisions, and provide self-determined estimated time frames for improvements in relation to those capacity constraints]

[Include a table on the specific flexibility provisions applied. Please take into account that the illustrative example below is part of the **Flex\_Summary** spreadsheet of the CRT and, thus, the country may also quote it directly in this document]

**Table 7-14.**

[Category]: flexibility provisions applied

| ***MPG flexibility provision*** | ***Gas*** | ***Description of the application of flexibility*** | ***Clarification of capacity constraint*** | ***Time frame for improvement*** | ***Progress made in addressing areas of improvement*** |
| --- | --- | --- | --- | --- | --- |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |

Note:

Source: [], based on the **Flex\_Summary** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the flexibility applied]

* + 1. **Uncertainty assessment and time-series consistency of the category**

MPG: provisions 26, 27, 29 and 44. Provision 29 offers flexibility to countries that may need it.

[Include a specific description of the quantitative estimate and qualitative discussion of the uncertainty of the category by GHG and GHG source for the starting year and the latest reporting year of the time series, indicate the main uncertainty sources (activity data or emission factors), include any other relevant qualitative description]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to uncertainty. If appropriate, include more detailed information on the uncertainty analysis of the category in Annex II and quote it in this section]

[Include a specific description of how the country ensured time-series consistency for each GHG source of the category, describe gaps and barriers observed, and any data splicing technique applied. It would be appropriate to apply, at a minimum, the time-series consistency activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the time-series consistency]

* + 1. **Category-specific QA/QC and verification**

MPG: provisions 34, 35 and 46. Provisions 34 and 35 offer flexibility to countries that may need it.

[Include a specific description of quality assurance and quality control activities applied by the country for each GHG source of the category. It would be appropriate to apply, at a minimum, the QA/QC activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to QA/QC activities. If appropriate, include more details on the category QA/QC activities in Annex IV]

* + 1. **Category-specific recalculations**

MPG: provisions 28 and 43.

[Include a specific description of the recalculations, indicating the justification for recalculations or any improvement made (in response to peer reviews, methodological changes, improved activity data, etc.), and the implications or effects these recalculations had on the GHG emission trend of the category]

[Include a table on the implications or effects that the recalculations had on the GHG emission trend of the category (see illustrative example below). Please take into account that the table is adapted from the **Table8s1** spreadsheet of the CRT and, thus, the country may quote the CRT directly in this document]

**Table 7-15.**

[Category]: comparison between previous inventory and current inventory (kt CO2 eq)

| ***NGI*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Previous NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Current NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Difference | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Difference % | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% |  |  |
| **Total effect %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |
| **Total effect net %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |

Note:

Source: [], based on the **Table8s1** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the recalculations]

* + 1. **Category-specific planned improvements**

MPG: provision 7.

[Include a specific description of the activities applied, in the process of being applied, or planned to improve the quality of the category (methods, activity data, emission factors, etc.), including, in particular, monitoring of activities detected by peer review processes or other review processes or previous analyses. It would probably be appropriate to include a table to systematize improvement activities. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the improvement plan]

* 1. **Incineration and open burning of waste (CRT 5.C)**
     1. **Description and trend of GHGs in the category**

MPG: provisions 47, 48, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

[Include a theoretical description of the category and its subcategories or GHG sources pursuant to the *2006 IPCC Guidelines* only if deemed relevant. In addition, include a practical description of the category in the country, indicating what subcategories or GHG sources are present, their relevance at the national level and a completeness summary]

[Include a description of the category's GHGs, in kt CO2 eq, and an explanation on: (1) percentage contribution of the category to the sector's total emissions in the latest inventory year and its percentage change over time; (2) emissions of the latest inventory year, and their key drivers; (3) percentage contribution of each GHG source in the latest inventory year; (4) variation between the base year and the latest inventory year, and its key drivers; (5) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (6) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total GHG emissions of the category by GHG source (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 7-16.**

[Category]: total GHG emissions by subcategory (kt CO2 eq)

| ***Subcategory*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of total GHG emissions of the category by GHG source (in kt CO2 eq), 1990-2022]

**Figure 7-7.**

[Category]: total GHG emissions by source (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the category or subcategory or its GHG sources]

* + 1. **Methodological issues of the category**

MPG: provisions 17, 20-24, 39 and 40.

[Include a specific description of the methods and methodological tiers applied in the category, describe or specify equations applied and their direct reference to the *2006 IPCC Guidelines* or other guidelines used by the country. In addition, it would be appropriate to specify the tools used for the calculation of GHGs. This information may be a repetition of the general methodological issues of the category. If this is the case, quote the relevant section]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of this category. If appropriate, include more detailed information on the methodological issues of the category in Annex V.V]

* + - 1. **Activity data of the category**

[Include a specific description of the activity data sources, assumptions used, data splicing techniques, rationale for choice of data, gaps and barriers, handling of restricted data and confidentiality, etc. If activity data sources are different for each GHG source, add a paragraph explaining each source individually]

[Include a summary table for activity data of the category by GHG source for the entire time series. Unlike emission tables, in the activity data table the years should be entered as row headers, and GHG sources as column headers (see the example below and adapt it as appropriate). Please, take into account that activity data are also included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 7-17.**

[Category]: activity data by GHG source (activity data unit)

| ***Year*** | ***GHG source 1*** | ***GHG source 2*** | ***GHG source 3*** | ***GHG source 4*** | ***GHG source 5*** | ***GHG source N*** |
| --- | --- | --- | --- | --- | --- | --- |
| 1990 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1991 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1992 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1993 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1994 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1995 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1996 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1997 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1998 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1999 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2000 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2001 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2002 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2003 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2004 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2005 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2006 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2007 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2008 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2009 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2010 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2011 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2012 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2013 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2014 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2015 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2016 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2017 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2018 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2019 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2020 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2021 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2022 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the activity data]

* + - 1. **Emission factors applied in the category**

[Include a specific description of the emission factor sources (if taken from the *2006 IPCC Guidelines*, clearly indicate the table where they appear), assumptions used, rationale for choice of data, gaps and barriers, etc. In the case of country-specific emission factors, also indicate where they were obtained, the method used for obtaining them (literature, research, specific models, expert opinion, etc.), and the consistency with default emission factors of the *2006 IPCC Guidelines*]

[Include a summary table for emission factors used by GHG source, especially country-specific emission factors (see the example below and adapt it as appropriate). Please, take into account that emission factors could also be included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 7-18.**

[Category]: emission factors applied by GHG source

| ***GHG source*** | ***GHG*** | ***Value*** | ***Unit*** |
| --- | --- | --- | --- |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the emission factors]

* + 1. **Description of any flexibility applied to the category**

MPG: provisions 4-6.

[Clearly indicate the provisions to which flexibility is applied, concisely clarify capacity constraints, noting that some constraints may be relevant to several provisions, and provide self-determined estimated time frames for improvements in relation to those capacity constraints]

[Include a table on the specific flexibility provisions applied. Please take into account that the illustrative example below is part of the **Flex\_Summary** spreadsheet of the CRT and, thus, the country may also quote it directly in this document]

**Table 7-19.**

[Category]: flexibility provisions applied

| ***MPG flexibility provision*** | ***Gas*** | ***Description of the application of flexibility*** | ***Clarification of capacity constraint*** | ***Time frame for improvement*** | ***Progress made in addressing areas of improvement*** |
| --- | --- | --- | --- | --- | --- |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |

Note:

Source: [], based on the **Flex\_Summary** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the flexibility applied]

* + 1. **Uncertainty assessment and time-series consistency of the category**

MPG: provisions 26, 27, 29 and 44. Provision 29 offers flexibility to countries that may need it.

[Include a specific description of the quantitative estimate and qualitative discussion of the uncertainty of the category by GHG and GHG source for the starting year and the latest reporting year of the time series, indicate the main uncertainty sources (activity data or emission factors), include any other relevant qualitative description]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to uncertainty. If appropriate, include more detailed information on the uncertainty analysis of the category in Annex II and quote it in this section]

[Include a specific description of how the country ensured time-series consistency for each GHG source of the category, describe gaps and barriers observed, and any data splicing technique applied. It would be appropriate to apply, at a minimum, the time-series consistency activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the time-series consistency]

* + 1. **Category-specific QA/QC and verification**

MPG: provisions 34, 35 and 46. Provisions 34 and 35 offer flexibility to countries that may need it.

[Include a specific description of quality assurance and quality control activities applied by the country for each GHG source of the category. It would be appropriate to apply, at a minimum, the QA/QC activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to QA/QC activities. If appropriate, include more details on the category QA/QC activities in Annex IV]

* + 1. **Category-specific recalculations**

MPG: provisions 28 and 43.

[Include a specific description of the recalculations, indicating the justification for recalculations or any improvement made (in response to peer reviews, methodological changes, improved activity data, etc.), and the implications or effects these recalculations had on the GHG emission trend of the category]

[Include a table on the implications or effects that the recalculations had on the GHG emission trend of the category (see illustrative example below). Please take into account that the table is adapted from the **Table8s1** spreadsheet of the CRT and, thus, the country may quote the CRT directly in this document]

**Table 7-20.**

[Category]: comparison between previous inventory and current inventory (kt CO2 eq)

| ***NGI*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Previous NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Current NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Difference | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Difference % | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% |  |  |
| **Total effect %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |
| **Total effect net %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |

Note:

Source: [], based on the **Table8s1** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the recalculations]

* + 1. **Category-specific planned improvements**

MPG: provision 7.

[Include a specific description of the activities applied, in the process of being applied, or planned to improve the quality of the category (methods, activity data, emission factors, etc.), including, in particular, monitoring of activities detected by peer review processes or other review processes or previous analyses. It would probably be appropriate to include a table to systematize improvement activities. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the improvement plan]

* 1. **Wastewater treatment and discharge (CRT 5.D)**
     1. **Description and trend of GHGs in the category**

MPG: provisions 47, 48, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

[Include a theoretical description of the category and its subcategories or GHG sources pursuant to the *2006 IPCC Guidelines* only if deemed relevant. In addition, include a practical description of the category in the country, indicating what subcategories or GHG sources are present, their relevance at the national level and a completeness summary]

[Include a description of the category's GHGs, in kt CO2 eq, and an explanation on: (1) percentage contribution of the category to the sector's total emissions in the latest inventory year and its percentage change over time; (2) emissions of the latest inventory year, and their key drivers; (3) percentage contribution of each GHG source in the latest inventory year; (4) variation between the base year and the latest inventory year, and its key drivers; (5) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (6) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table for the total GHG emissions of the category by GHG source (in kt CO2 eq). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 7-21.**

[Category]: total GHG emissions by subcategory (kt CO2 eq)

| ***Subcategory*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
|  | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of total GHG emissions of the category by GHG source (in kt CO2 eq), 1990-2022]

**Figure 7-8.**

[Category]: total GHG emissions by source (kt CO2 eq), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the category or subcategory or its GHG sources]

* + 1. **Methodological issues of the category**

MPG: provisions 17, 20-24, 39 and 40.

[Include a specific description of the methods and methodological tiers applied in the category, describe or specify equations applied and their direct reference to the *2006 IPCC Guidelines* or other guidelines used by the country. In addition, it would be appropriate to specify the tools used for the calculation of GHGs. This information may be a repetition of the general methodological issues of the category. If this is the case, quote the relevant section]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of this category. If appropriate, include more detailed information on the methodological issues of the category in Annex V.V]

* + - 1. **Activity data of the category**

[Include a specific description of the activity data sources, assumptions used, data splicing techniques, rationale for choice of data, gaps and barriers, handling of restricted data and confidentiality, etc. If activity data sources are different for each GHG source, add a paragraph explaining each source individually]

[Include a summary table for activity data of the category by GHG source for the entire time series. Unlike emission tables, in the activity data table the years should be entered as row headers, and GHG sources as column headers (see the example below and adapt it as appropriate). Please, take into account that activity data are also included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 7-22.**

[Category]: activity data by GHG source (activity data unit)

| ***Year*** | ***GHG source 1*** | ***GHG source 2*** | ***GHG source 3*** | ***GHG source 4*** | ***GHG source 5*** | ***GHG source N*** |
| --- | --- | --- | --- | --- | --- | --- |
| 1990 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1991 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1992 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1993 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1994 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1995 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1996 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1997 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1998 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1999 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2000 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2001 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2002 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2003 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2004 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2005 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2006 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2007 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2008 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2009 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2010 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2011 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2012 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2013 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2014 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2015 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2016 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2017 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2018 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2019 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2020 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2021 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2022 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the activity data]

* + - 1. **Emission factors applied in the category**

[Include a specific description of the emission factor sources (if taken from the *2006 IPCC Guidelines*, clearly indicate the table where they appear), assumptions used, rationale for choice of data, gaps and barriers, etc. In the case of country-specific emission factors, also indicate where they were obtained, the method used for obtaining them (literature, research, specific models, expert opinion, etc.), and the consistency with default emission factors of the *2006 IPCC Guidelines*]

[Include a summary table for emission factors used by GHG source, especially country-specific emission factors (see the example below and adapt it as appropriate). Please, take into account that emission factors could also be included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 7-23.**

[Category]: emission factors applied by GHG source

| ***GHG source*** | ***GHG*** | ***Value*** | ***Unit*** |
| --- | --- | --- | --- |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | CH4 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the emission factors]

* + 1. **Description of any flexibility applied to the category**

MPG: provisions 4-6.

[Clearly indicate the provisions to which flexibility is applied, concisely clarify capacity constraints, noting that some constraints may be relevant to several provisions, and provide self-determined estimated time frames for improvements in relation to those capacity constraints]

[Include a table on the specific flexibility provisions applied. Please take into account that the illustrative example below is part of the **Flex\_Summary** spreadsheet of the CRT and, thus, the country may also quote it directly in this document]

**Table 7-24.**

[Category]: flexibility provisions applied

| ***MPG flexibility provision*** | ***Gas*** | ***Description of the application of flexibility*** | ***Clarification of capacity constraint*** | ***Time frame for improvement*** | ***Progress made in addressing areas of improvement*** |
| --- | --- | --- | --- | --- | --- |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |
|  | CO2 |  |  |  |  |
|  | CH4 |  |  |  |  |
|  | N2O |  |  |  |  |

Note:

Source: [], based on the **Flex\_Summary** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the flexibility applied]

* + 1. **Uncertainty assessment and time-series consistency of the category**

MPG: provisions 26, 27, 29 and 44. Provision 29 offers flexibility to countries that may need it.

[Include a specific description of the quantitative estimate and qualitative discussion of the uncertainty of the category by GHG and GHG source for the starting year and the latest reporting year of the time series, indicate the main uncertainty sources (activity data or emission factors), include any other relevant qualitative description]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to uncertainty. If appropriate, include more detailed information on the uncertainty analysis of the category in Annex II and quote it in this section]

[Include a specific description of how the country ensured time-series consistency for each GHG source of the category, describe gaps and barriers observed, and any data splicing technique applied. It would be appropriate to apply, at a minimum, the time-series consistency activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the time-series consistency]

* + 1. **Category-specific QA/QC and verification**

MPG: provisions 34, 35 and 46. Provisions 34 and 35 offer flexibility to countries that may need it.

[Include a specific description of quality assurance and quality control activities applied by the country for each GHG source of the category. It would be appropriate to apply, at a minimum, the QA/QC activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to QA/QC activities. If appropriate, include more details on the category QA/QC activities in Annex IV]

* + 1. **Category-specific recalculations**

MPG: provisions 28 and 43.

[Include a specific description of the recalculations, indicating the justification for recalculations or any improvement made (in response to peer reviews, methodological changes, improved activity data, etc.), and the implications or effects these recalculations had on the GHG emission trend of the category]

[Include a table on the implications or effects that the recalculations had on the GHG emission trend of the category (see illustrative example below). Please take into account that the table is adapted from the **Table8s1** spreadsheet of the CRT and, thus, the country may quote the CRT directly in this document]

**Table 7-25.**

[Category]: comparison between previous inventory and current inventory (kt CO2 eq)

| ***NGI*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Previous NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Current NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Difference | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Difference % | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% |  |  |
| **Total effect %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |
| **Total effect net %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |

Note:

Source: [], based on the **Table8s1** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the recalculations]

* + 1. **Category-specific planned improvements**

MPG: provision 7.

[Include a specific description of the activities applied, in the process of being applied, or planned to improve the quality of the category (methods, activity data, emission factors, etc.), including, in particular, monitoring of activities detected by peer review processes or other review processes or previous analyses. It would probably be appropriate to include a table to systematize improvement activities. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the improvement plan]

* 1. **Other (specify) (CRT 5.E)**

[Only if applicable]

1. **OTHER (CRT 6)**

[Only if applicable copy the structure of any previous sector]

1. **INDIRECT CO2 AND N2O EMISSIONS**

MPG: provision 52.

* 1. **Description of sources of indirect emissions in the GHG inventory**

MPG: provisions 47, 50, 51, 52, 57 and 58. Provisions 48, 57 and 58 offer flexibility to countries that may need it.

[Include a theoretical description of the indirect CO2 and N2O emissions in the inventory pursuant to the *2006 IPCC Guidelines* only if deemed relevant. In addition, include a practical description of the indirect CO2 and N2O emission sources in the country, indicating what sources are present, their relevance at the national level and a completeness summary]

[Include the summary table on indirect CO2 and N2O emissions in the inventory for the latest inventory year by sectors, and an explanation on emissions by each GHG and precursor gas in the national total emissions (kt for each GHG and precursor)]

**Table 9-1.**

Summary for the indirect emissions of the national GHG inventory [latest inventory year] by sector

| ***Code*** | ***GHG emissions and removals*** | ***Emission sources*** | | | | | ***Indirect emissions*** | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***CH4*** ***(kt)*** | ***CO*** ***(kt)*** | ***NMVOC*** ***(kt)*** | ***NOx***  ***(kt)*** | ***NH3*** ***(kt)*** | ***CO2*** ***(kt)*** | ***N2O*** ***(kt)*** |
|  | **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |
| 1. | Energy | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2. | Industrial processes and product use | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 3. | Agriculture | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  | 1,111.1 | 1,111.1 |
| 4. | LULUCF | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  | 1,111.1 | 1,111.1 |
| 5. | Waste | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 6. | Other (please specify) | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |

Note: Use the following notation keys where numerical data are not available: NA = not applicable; NE = not estimated; NO = not occurring; IE = included elsewhere; C = confidential.

Source: [], based on the **Table6** spreadsheet of the CRT.

[Include a description of indirect CO2 and N2O emissions, in kt, and an explanation on: (1) indirect CO2 and N2O emissions of the latest inventory year, and their key drivers; (2) percentage contribution of each sector in the latest inventory year; (3) variation between the base year and the latest inventory year, and its key drivers; (4) variation between the latest inventory year of the previous inventory and the latest inventory year of the current inventory, and its key drivers; and (5) any interannual variation or fluctuation that significantly affects the trend between the base year and the latest inventory year, and its key drivers]

[Include a summary table on indirect CO2 emissions by sector (kt). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 9-2.**

Indirect CO2 emissions: total indirect CO2 by sector (kt)

| ***Category*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Energy | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| IPPU | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Agriculture | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| LULUCF | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Waste | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of indirect CO2 emissions by sector (kt), 1990-2022]

**Figure 9-1.**

Indirect CO2 emissions: total indirect CO2 by sector (kt), 1990-2022

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include a summary table on indirect N2O emissions by sector (kt). At a minimum, include 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2021 and 2022 or, if any flexibility is applied, at least the starting year and the latest year of the series (see example below)]

**Table 9-3.**

Indirect N2O emissions: total indirect N2O by sector (kt)

| ***Category*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Energy | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| IPPU | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Waste | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include a summary figure of indirect N2O emissions by sector (kt), 1990-2022]

**Figure 9-2.**

Indirect N2O emissions: total indirect N2O by sector (kt)

|  |
| --- |
| **Proposed size: 6 cm x 15.5 cm** |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to indirect CO2 and N2O emissions]

* 1. **Methodological issues of indirect emissions**

MPG: provisions 17, 20-24, 39 and 40.

[Include a specific description of the methods and methodological tiers applied to indirect CO2 and N2O emissions, describe or specify equations applied and their direct reference to the *2006 IPCC Guidelines* or other guidelines used by the country. In addition, it would be appropriate to specify the tools used for the calculation of GHGs. This information may be a repetition of the general methodological issues of the indirect CO2 and N2O emissions. If this is the case, quote the relevant section]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the methodological issues of indirect CO2 and N2O emissions. If appropriate, include more detailed information on the methodological issues of indirect CO2 and N2O emissions in Annex V]

* + 1. **Activity data of indirect emissions**

[Include a specific description of the activity data sources, assumptions used, data splicing techniques, rationale for choice of data, gaps and barriers, handling of restricted data and confidentiality, etc. If activity data sources are different for each GHG source, add a paragraph explaining each source individually]

[Include a summary table for activity data of the category by GHG source for the entire time series. Unlike emission tables, in the activity data table the years should be entered as row headers, and GHG sources as column headers (see the example below and adapt it as appropriate). Please, take into account that activity data are also included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 9-4.**

[Category]: activity data by GHG source (activity data unit)

| ***Year*** | ***GHG source 1*** | ***GHG source 2*** | ***GHG source 3*** | ***GHG source 4*** | ***GHG source 5*** | ***GHG source N*** |
| --- | --- | --- | --- | --- | --- | --- |
| 1990 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1991 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1992 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1993 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1994 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1995 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1996 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1997 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1998 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 1999 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2000 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2001 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2002 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2003 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2004 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2005 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2006 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2007 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2008 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2009 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2010 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2011 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2012 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2013 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2014 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2015 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2016 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2017 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2018 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2019 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2020 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2021 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| 2022 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the activity data]

* + 1. **Emission factors applied to indirect emissions**

[Include a specific description of the emission factor sources (if taken from the *2006 IPCC Guidelines*, clearly indicate the table where they appear), assumptions used, rationale for choice of data, gaps and barriers, etc. In the case of country-specific emission factors, also indicate where they were obtained, the method used for obtaining them (literature, research, specific models, expert opinion, etc.), and the consistency with default emission factors of the *2006 IPCC Guidelines*]

[Include a summary table for emission factors used by GHG source, especially country-specific emission factors (see the example below and adapt it as appropriate). Please, take into account that emission factors could also be included in the CRT and, thus, the country may also quote the CRT directly in this document]

**Table 9-5.**

[Category]: emission factors applied by GHG source

| ***GHG source*** | ***GHG*** | ***Value*** | ***Unit*** |
| --- | --- | --- | --- |
|  | CO2 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |
|  | CO2 | 1,111.1 |  |
|  | N2O | 1,111.1 |  |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the emission factors]

* 1. **Uncertainty assessment and time-series consistency of indirect emissions**

MPG: provisions 26, 27, 29 and 44. Provision 29 offers flexibility to countries that may need it.

[Include a specific description of the quantitative estimate and qualitative discussion of the uncertainty of the category by GHG and GHG source for the starting year and the latest reporting year of the time series, indicate the main uncertainty sources (activity data or emission factors), include any other relevant qualitative description]

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to uncertainty. If appropriate, include more detailed information on the uncertainty analysis of the category in Annex II and quote it in this section]

[Include a specific description of how the country ensured time-series consistency for each GHG source of the category, describe gaps and barriers observed, and any data splicing technique applied. It would be appropriate to apply, at a minimum, the time-series consistency activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the time-series consistency]

* 1. **QA/QC and verification of indirect emissions**

MPG: provisions 34, 35 and 46. Provisions 34 and 35 offer flexibility to countries that may need it.

[Include a specific description of quality assurance and quality control activities applied by the country for each indirect CO2 and N2O emission source. It would be appropriate to apply, at a minimum, the QA/QC activities included in the *2006 IPCC Guidelines* for each category. Include any conclusion or relevant aspect that the country may want to highlight pertaining to QA/QC activities. If appropriate, include more detailed information on the QA/QC activities of indirect CO2 and N2O emissions in Annex IV]

* 1. **Recalculations of indirect emissions**

MPG: provisions 28 and 43.

[Include a specific description of the recalculations, indicating the justification for recalculations or any improvement made (in response to peer reviews, methodological changes, improved activity data, etc.), and the implications or effects these recalculations had on the GHG emission trend of the category]

[Include a table on the implications or effects that the recalculations had on the GHG emission trend of the category (see illustrative example below). Please take into account that the table is adapted from the **Table8s1** spreadsheet of the CRT and, thus, the country may quote the CRT directly in this document]

**Table 9-6.**

[Category]: comparison between previous inventory and current inventory (kt CO2 eq)

| ***NGI*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** | ***2021*** | ***2022*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Previous NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Current NGI | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Difference | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |  |  |
| Difference % | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% | 11.1% |  |  |
| **Total effect %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |
| **Total effect net %** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** | **11.1%** |  |  |

Note:

Source: [], based on the **Table8s1** spreadsheet of the CRT.

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to the recalculations]

* 1. **Planned improvements of indirect emissions**

MPG: provision 7.

[Include a specific description of the activities applied, in the process of being applied, or planned to improve the quality of indirect CO2 and N2O emissions (methods, activity data, emission factors, etc.), including, in particular, monitoring of activities detected by peer review processes or other review processes or previous analyses. It would probably be appropriate to include a table to systematize improvement activities. Include any conclusion or relevant aspect that the country may want to highlight pertaining to the improvement plan]

1. **RECALCULATIONS AND IMPROVEMENTS**
   1. **Explanations and justification for recalculations**

MPG: provisions 28 and 43.

[Include a qualitative description of inventory recalculations on a sector-by-sector and category-by-category basis, indicating why recalculations were made, either in response to peer reviews, previous reviews or analyses, methodological changes, improved activity data, etc.]

[Include a summary table for recalculations by sector and category. An illustrative example is provided below]

**Table 10-1.**

Summary of recalculations of [country] national GHG inventory

| ***Sector*** | ***Category*** | ***NID section*** | ***Reason for recalculations*** |
| --- | --- | --- | --- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Note:

Source:

[Include any explanatory information or justification that the country may want to highlight pertaining to the inventory recalculations]

* 1. **Implications for emission and removal levels**

MPG: provisions 28 and 43.

[Include a description of the quantitative implications that the recalculations had on the previous inventory and the current inventory for comparable years. If appropriate, include the description for each sector and GHG]

[Include a summary table for the quantitative difference of GHG emissions and removals between the previous inventory and the current inventory. An illustrative example is presented below]

**Table 10-2.**

Summary of the difference of GHG emissions and removals between the previous inventory and the current inventory by sector (kt CO2 eq)

| ***Sector*** | ***1990*** | ***1995*** | ***2000*** | ***2005*** | ***2010*** | ***2015*** | ***2020*** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Energy | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| IPPU | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Agriculture | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| LULUCF | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| Waste | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 | 1,111.1 |
| **Total** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |
| **Total net** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** | **1,111.1** |

Note:

Source:

[Include any other conclusion or relevant aspect that the country may want to highlight pertaining to the implications for emission and removal levels]

* 1. **Implications for emissions and removal trends**

MPG: provisions 28 and 43.

[Include a description of the quantitative implications the recalculations had on the trends of the previous inventory and the current inventory for the entire comparable time series, including a description of the implications and effects the recalculations had on the time-series consistency]

[Include a summary table for the quantitative implications of recalculations on the entire comparable time series, including total emissions of the previous inventory, total emissions of the current inventory, difference between total emissions of both inventories, percentage difference between total emissions of both inventories, percentage impact of recalculations on total emissions (excluding LULUCF), total net GHG of the previous inventory, total net GHG of the current inventory, difference between the total net GHG of both inventories, percentage difference between total net GHG of both inventories, percentage impact of recalculations on total net GHG (including LULUCF). The example below is based on the **Table8s1** spreadsheet of the CRT. Please, take into account that this table is part of the CRT and, thus, the country may also quote it directly in this document]

**Table 10-3.**

Summary of the implications for the GHG emissions and removals trend between the previous inventory and the current inventory, 1990-2020

| ***Year*** | ***Total previous inventory***  ***(kt CO2 eq)*** | ***Total current inventory***  ***(kt CO2 eq)*** | ***Total difference***  ***(kt CO2 eq)*** | ***Total difference %*** | ***Implications on total (without LULUCF) %*** | ***Total net previous inventory***  ***(kt CO2 eq)*** | ***Total net current inventory***  ***(kt CO2 eq)*** | ***Total net difference***  ***(kt CO2 eq)*** | ***Total net difference %*** | ***Implications on total net (with LULUCF) %*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1990 | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% |
| 1991 | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% |
| 1992 | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% |
| 1993 | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% |
| 1994 | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% |
| 1995 | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% |
| 1996 | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% |
| 1997 | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% |
| 1998 | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% |
| 1999 | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% |
| 2000 | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% |
| 2001 | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% |
| 2002 | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% |
| 2003 | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% |
| 2004 | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% |
| 2005 | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% |
| 2006 | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% |
| 2007 | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% |
| 2008 | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% |
| 2009 | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% |
| 2010 | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% |
| 2011 | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% |
| 2012 | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% |
| 2013 | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% |
| 2014 | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% |
| 2015 | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% |
| 2016 | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% |
| 2017 | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% |
| 2018 | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% |
| 2019 | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% |
| 2020 | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% | 1,111.1 | 1,111.1 | 1,111.1 | 1.1% | 1.1% |

Note:

Source: [], based on the **Table8s1** spreadsheet of the CRT.

[Include any other conclusion or relevant aspect that the country may want to highlight pertaining to the implications for emission and removal trends]

* 1. **Areas of improvement and capacity-building in response to the review process**

MPG: provision 7a and 7b.

[Include a description of areas of improvement identified by the country and the technical expert review team in relation to the implementation of Article 13 of the Paris Agreement. In addition, indicate how the country is addressing or intends to address areas of improvement]

[Include a table systematizing areas of improvement and capacity-building. An illustrative example is presented below]

**Table 10-4.**

Summary of areas of improvement identified and how the country addresses them

| ***Sector*** | ***Category*** | ***Description of area of improvement*** | ***Origin (country/review)*** | ***Response by country*** | ***Time frame for application*** |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

Notes:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to areas of improvement and capacity-building]

* 1. **Areas of improvement and capacity-building related to flexibility provisions**

MPG: provision 7c and 7d.

[Include a description of areas of improvement that are related to the flexibility provisions used, and reporting-related capacity-building support needs]

[Include a table systematizing areas of improvement and capacity-building related to flexibility provisions. An illustrative example is presented below]

**Table 10-5.**

Summary of the flexibility provisions applied

| ***Sector*** | ***Category*** | ***Description of area of improvement*** | ***MPG flexibility provision*** | ***Capacity-building support needs*** | ***Progress made*** |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

Note:

Source:

[Include any conclusion or relevant aspect that the country may want to highlight pertaining to areas of improvement and capacity-building related to flexibility provisions]

**ANNEXES TO THE NATIONAL INVENTORY DOCUMENT**

**Annex I: Key categories**

MPG: provision 25. Provision 25 offers flexibility to countries that may need it.

[Include the following detailed information: (1) description of methodologies used for identifying key categories (if different from the IPCC Guidelines tier 1 approach); (2) information on the level of disaggregation; and (3) Table 4.2 and 4.3 of volume 1 of the *2006 IPCC Guidelines*, including and excluding LULUCF]

**Annex II: Uncertainty assessment**

MPG: provision 29. Provision 29 offers flexibility to countries that may need it.

[Include the following detailed information: (1) description of methodologies used for assessing uncertainties; and (2) Table 3.3 of volume 1 of the *2006 IPCC Guidelines*]

**Annex III: Detailed description of the reference approach**

MPG: provision 36.

[Include detailed information on inputs to the reference approach (such as the national energy balance and its tables) and the results of the comparison of national estimates of emissions with those obtained using the sectoral approach]

**Annex IV: Quality assurance and quality control plan**

MPG: provisions 34 and 35. Provisions 34 and 35 offer flexibility to countries that may need it.

[Include detailed information pertaining to the requirements of provisions 34, 35 and 46 of the MPG]

**Annex V: Other additional information, such as detailed methodological descriptions**

[Include, when appropriate, any additional information that increases the transparency of the methodology applied to estimate GHG of a specific category. Include subtitles with the name and code of the category where more information will be included. For example]

**Annex V.I: Energy**

[include more information to increase the transparency of the methodologies applied in the sector]

**Annex V.II: Industrial processes and product use**

[include more information to increase the transparency of the methodologies applied in the sector]

**Annex V.III: Agriculture**

[include more information to increase the transparency of the methodologies applied in the sector]

**Annex V.IV: Land use, land-use change and forestry**

[include more information to increase the transparency of the methodologies applied in the sector]

**Annex V.V: Waste**

[include more information to increase the transparency of the methodologies applied in the sector]

**Annex V.VI: Other substances that have an impact on climate**

[Include additional information to increase transparency on the methodologies applied to estimate and report other substances that have an impact on climate to provide additional information for monitoring its NDC. For example, carbon black emissions, tropospheric ozone, particulate matter, other short-lived climate pollutants, etc.]

**Annex VI: Common reporting tables (CRT)**

**REFERENCES**

[Include all references quoted in the *[Country] National Inventory Document*]

Forma

Descripción generada automáticamente con confianza baja

1. CBIT-GSP is a global project, funded by the Global Environment Facility (GEF), implemented by the United Nations Environment Programme (UNEP) and executed by the UNEP Copenhagen Climate Centre (UNEP-CCC). For more information on CBIT-GSP, please visit: <https://climate-transparency-platform.org/> [↑](#footnote-ref-1)
2. Available at <https://unfccc.int/sites/default/files/resource/CMA2021_L10a2E.pdf#page=44> [↑](#footnote-ref-2)
3. Available at <https://unfccc.int/sites/default/files/resource/CMA2018_03a02E.pdf#page=20> [↑](#footnote-ref-3)
4. Available at <https://unfccc.int/sites/default/files/resource/CMA2021_L10a2E.pdf#page=7> [↑](#footnote-ref-4)
5. Available at <https://www.ipcc-nggip.iges.or.jp/public/2006gl/index.html> [↑](#footnote-ref-5)
6. Available at <https://www.ipcc-nggip.iges.or.jp/public/wetlands/index.html> [↑](#footnote-ref-6)
7. Available at <https://www.ipcc-nggip.iges.or.jp/public/2019rf/index.html> [↑](#footnote-ref-7)
8. For more information, see Chapter 4, Volume 1, *2006 IPCC Guidelines*. [↑](#footnote-ref-8)
9. For more information, see Chapter 6, Volume 1, *2006 IPCC Guidelines*. [↑](#footnote-ref-9)
10. For more information, see Chapter 3, Volume 1, *2006 IPCC Guidelines*. [↑](#footnote-ref-10)
11. Countries may elect either to report the information on specific flexibility provisions applied in a separate chapter or to integrate this information into sectoral chapters relevant to where specific flexibility provisions have been applied. [↑](#footnote-ref-11)