COMMISSION IMPLEMENTING REGULATION (EU) 2020/1208 of 7 August 2020 on structure, format, submission processes and review of information reported by Member States pursuant to Regulation (EU) 2018/1999

Incorporated and adapted by the Ministerial Council Decision 2021/14/MC-EnC of 30 November 2021 on incorporating Regulation (EU) 2018/1999 in the Energy Community acquis communautaire and amending Annex I of the Treaty.

The adaptations made by Ministerial Council Decision 2021/14/MC-EnC are highlighted in **bold and blue**.

CHAPTER I SUBJECT MATTER, SCOPE AND DEFINITIONS

Article 1

Subject matter

This Regulation establishes rules implementing Regulation (EU) 2018/1999 as adapted and adopted by Ministerial Council Decision 2021/14/MC-EnC as regards the following:

(a) **Contracting Parties**' reporting on national adaptation actions, the use of **carbon price mechanism** revenues and financial and technology support provided to developing countries pursuant to Article 19 of Regulation (EU) 2018/1999 **as adapted and adopted by Ministerial Council Decision 2021/14/ MC-EnC**;

(b) **Contracting Parties**' reporting on approximated greenhouse gas (or GHG) inventories, greenhouse gas inventories and accounted greenhouse gas emissions and removals pursuant to Article 26 of Regulation (EU) 2018/1999 as adapted and adopted by Ministerial Council Decision 2021/14/MC-EnC;

(c) requirements on the establishment, operation and functioning of national inventory systems pursuant to Article 37 of Regulation (EU) 2018/1999 as adapted and adopted by Ministerial Council Decision 2021/14/MC-EnC;

(d) the timing and the procedure for carrying out the comprehensive review pursuant to Article 38 of Regulation (EU) 2018/1999 as adapted and adopted by Ministerial Council Decision 2021/14/MC-EnC;

(e) **Contracting Parties**' reporting on national system for policies and measures and projections pursuant to Article 39 of Regulation (EU) 2018/1999 as adapted and adopted by Ministerial Council Decision 2021/14/MC-EnC.

Article 2 Scope

This Regulation applies to the reports submitted by the **Contracting Parties** containing data required for the year **2023** onwards.

Article 3 Definitions

For the purposes of this Regulation, the following definitions shall apply:

(1) 'common reporting table', or 'CRT', means a table for information on anthropogenic greenhouse gas emissions by sources and removals by sinks included in Annex II to Decision 24/CP.19 of the Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC) (Decision 24/CP.19);

(2) 'reference approach' means the reference approach by the Intergovernmental Panel on Climate Change (IPCC), as set out in the 2006 IPCC Guidelines for National Greenhouse Gas Inventories ('2006 IPCC Guidelines');

(3) 'approach 1' means the basic method for the estimation of uncertainties included in the 2006 IPCC Guidelines;

(4) 'key category' means a category which has a significant influence on a **Contracting Party**'s or the **Energy Community** total inventory of greenhouse gases in terms of the absolute level of emissions and removals, the trend in emissions and removals, or uncertainty in emissions and removals;

(5) 'sectoral approach' means the IPCC sectoral approach as set out in the 2006 IPCC Guidelines;

(6) 'outline for greenhouse gas inventory documents' means the outline set out in the Appendix to the UNFCCC reporting guidelines on annual greenhouse gas inventories as included in Annex I to Decision 24/CP.19.;

(7) 'transparency MPGs' means the modalities, procedures and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement, as set out in in the Annex to Decision 18/CMA.1 of the Conference of the Parties to the UNFCCC serving as meeting of the Parties to the Paris Agreement;

(8) 'greenhouse gas inventory guidelines' mean guidelines specified in Article 3 of the Commission Delegated Regulation (EU) 2020/1044 (9), as adapted and adopted by Ministerial Council Decision 2021/14/MC-EnC;

(9) 'recalculation' is a procedure for re-estimating, in accordance with the greenhouse gas inventory guidelines anthropogenic GHG emissions by sources and removals by sinks of previously submitted GHG inventories as a consequence of changes in methodologies, changes in the manner in which emission factors and activity data are obtained and used, or the inclusion of new source and sink categories.

CHAPTER II

REPORTING BY CONTRACTING PARTIES ON NATIONAL ADAPTATION ACTIONS, CARBON PRICE MECHANISM REVENUES AND SUPPORT TO DEVEL-OPING COUNTRIES

Article 4

Information on national adaptation actions

Contracting Parties shall report the information on their national adaptation actions pursuant to Article 19(1) of Regulation (EU) 2018/1999 **as adapted and adopted by Ministerial Council Decision 2021/14/MC-EnC** in accordance with the format set out in Annex I to this Regulation.

Article 5

Information on the use of carbon price mechanism revenues

Contracting Parties shall report the information on the use of revenues generated by **carbon price mechanisms** pursuant to Article 19(2) of Regulation (EU) 2018/1999 as adapted and adopted by **Ministerial Council Decision 2021/14/MC-EnC** in accordance with the formats set out in Annex II to this Regulation.

Article 6

Information on financial and technology support provided to developing countries

1. **Contracting Parties** shall report the quantitative information on public and mobilised financial resources referred to in point (a)(i) and available information on activities by the Member State related to public-funded technology transfer projects and capacity-building projects for developing countries under the UNFCCC referred to in point (a)(iii) of Part 2 of Annex VIII to Regulation (EU) 2018/1999 as adapted and adopted by Ministerial Council Decision 2021/14/MC-EnC, in accordance with the common tabular format introduced by the Organisation for Economic Cooperation and Development (OECD) Development Assistance Committee for reporting to the Creditor Reporting System (CRS) or the formats set out in Annex III to this Regulation.

2. **Contracting Parties** shall report the qualitative methodological information explaining the method used to calculate the quantitative information referred to in point (a)(ii) of Part 2 of Annex VIII to Regulation (EU) 2018/1999 **as adapted and adopted by Ministerial Council Decision 2021/14/MC-EnC** in accordance with the format set out in Annex IV to this Regulation.

3. Contracting Parties shall report available information on the planned provision of support referred to in point (b) of Part 2 of Annex VIII to Regulation (EU) 2018/1999 as adapted and adopted by Ministerial Council Decision 2021/14/MC-EnC in accordance with the format set out in Annex V to this Regulation.

CHAPTER III

REPORTING BY CONTRACTING PARTIES ON APPROXIMATED GREENHOUSE GAS INVENTORIES, GREENHOUSE GAS INVENTORIES AND ACCOUNTED GREENHOUSE GAS EMISSIONS AND REMOVALS

Article 7

Reporting on approximated greenhouse gas inventories

(a) 1. **Contracting Parties** shall report their approximated greenhouse gas inventories pursuant to Article 26(2) of Regulation (EU) 2018/1999 **as adapted and adopted by Ministerial Council Decision 2021/14/MC-EnC** in accordance with the format set out in Annex VI, at a level of disaggregation of categories reflecting the activity data and methods available for the preparation of estimates for the year X-1;

(b) <...>

2. **Contracting Parties** shall provide explanations including on the main drivers for the key changes in emissions and removals reported in accordance with the format set out in Annex VI compared to the most recent final greenhouse gas inventory reported.

Article 8

General rules for reporting on greenhouse gas inventories

1. **Contracting Parties** shall report the information referred to in Article 26(3) of Regulation (EU) 2018/1999 as adapted and adopted by Ministerial Council Decision 2021/14/MC-EnC by completing, in accordance with the greenhouse gas inventory guidelines and with the rules provided for in this Regulation:

(a) the common reporting tables by providing a complete set of spread sheets or Extensible Markup Language (XML) files, depending on the availability of the appropriate software, and covering **Contracting Party**'s geographical scope under Regulation (EU) 2018/1999 **as adapted and adopted by Ministerial Council Decision 2021/14/MC-EnC**;

(b) the information as specified in Articles 9 to 23 of this Regulation.

2. **Contracting Parties** shall draft the national inventory report referred to in Article 26(3) of Regulation (EU) 2018/1999 **as adapted and adopted by Ministerial Council Decision 2021/14/MC-EnC** ('national inventory report', 'NIR') based on the outline for greenhouse gas inventory documents, and following the rules provided for in this Regulation. **Contracting Parties** shall include the information reported pursuant to Articles 9, 10, 12 and 14 to 18 of this Regulation in the national inventory report or in a separate Annex to the national inventory report and indicate clearly in accordance with Annex VII where the information is provided.

Reporting on recalculations

Contracting Parties shall report the reasons for recalculations of greenhouse gas emissions and removals referred to in point (d) of Part 1 of Annex V to Regulation (EU) 2018/1999 in the years 1990, 2005 and X-3; how the time series consistency for all reported years is maintained in writing in the form of a draft of the dedicated summary chapter on recalculations of the national inventory report.

Article 10

Reporting on implementation of recommendations

1. Contracting Parties shall report the information on the steps taken to improve inventory estimates referred to in point (g) of Part 1 of Annex V to Regulation (EU) 2018/1999 as adapted and adopted by Ministerial Council Decision 2021/14/MC-EnC in accordance with the formats set out in Annex VIII to this Regulation.

2. In their reports referred to in paragraph 1, **Contracting Parties** shall cover both issues raised for the first time in the most recent respective review reports and issues repeated from previous review reports.

Article 11

Reporting on inventory methods, emission factors and on related methodological descriptions for Energy Community key categories

1. **Contracting Parties** shall provide the following information for the preparation of the **Energy Community** inventory report referred to in point (m) of Part 1 of Annex V of Regulation (EU) 2018/1999 **as adapted and adopted by Ministerial Council Decision 2021/14/MC-EnC**:

(a) summary information on the methods and emission factors used for the **Energy Community**'s key categories within the relevant XML files of the common reporting tables;

(b) for those **Energy Community** key categories, where information on methods and emission factors is not contained in the common reporting tables, information in accordance with Part 3 of Annex IX of this Regulation;

(c) updated summary methodological descriptions for the **Energy Community**'s key categories in accordance with the format set out in Part 4 of Annex IX.

2. For the purpose of reporting under paragraph 1, the **Energy Community Secretariat** shall provide the **Contracting Parties** with the following:

(a) the list of the most recent **Energy Community**'s key categories by 31 October in accordance with the format set out in Part 1 of Annex IX;

(b) the updated list referred to in paragraph 2(a) with changes highlighted by 28 February;

(c) where available, information on inventory methods, emission factors and on summary methodological descriptions by 31 October in accordance with the format set out in Part 2 of Annex IX;

(d) the updated information referred to in paragraph 2(c) by 28 February.

Reporting on uncertainty and completeness

1. **Contracting Parties** shall report at least approach 1 uncertainty estimates referred to in point (m) of Part 1 of Annex V to Regulation (EU) 2018/1999 **as adapted and adopted by Ministerial Council Decision 2021/14/MC-EnC** in accordance with the format set out in Annex X to this Regulation.

2. Contracting Parties shall report the information on the general assessment of completeness referred to in point (m) of Part 1 of Annex V to Regulation (EU) 2018/1999 as adapted and adopted by Ministerial Council Decision 2021/14/MC-EnC in the national inventory report, specifying:

(a) the categories, which were reported as not estimated (NE), as defined in the transparency MPGs, and detailed explanations for the use of this notation key especially where the greenhouse gas inventory guidelines provide methods for estimation of greenhouse gases;

(b) the geographical coverage of the greenhouse gas inventory, and any differences between the geographical coverage under the UNFCCC and the Paris Agreement and under Regulation (EU) 2018/1999 as adapted and adopted by Ministerial Council Decision 2021/14/MC-EnC.

Article 13

Reporting on indicators

Contracting Parties shall report information on indicators referred to in point (e) of Part 1 of Annex V to Regulation (EU) 2018/1999 **as adapted and adopted by Ministerial Council Decision 2021/14/ MC-EnC** in accordance with the format set out in Annex XI.

Article 14

Reporting on consistency of reported emissions <...>

1. **Contracting Parties** shall report the information referred to in point (h) of Part 1 of Annex V to Regulation (EU) 2018/1999 **as adapted and adopted by Ministerial Council Decision 2021/14/MC-EnC** in accordance with the format set out in Annex XII to this Regulation.

2. Contracting Parties shall report the information on results of the checks referred to in point (i) of Part 1 of Annex V of Regulation (EU) 2018/1999 as adapted and adopted by Ministerial Council Decision 2021/14/MC-EnC in a textual format.

Article 15

<...>

Reporting on consistency of the data reported on fluorinated greenhouse gases

Contracting Parties who have incorporated Regulation (EU) 517/2014 shall report the information on the results of the checks referred to in point (j)(ii) of Part 1 of Annex V to

Regulation (EU) 2018/1999 in a textual format, specifying:

(a) the checks performed by the Member State concerning the level of detail, the data sets and the submissions compared;

(b) the main results of the checks and explanations for the main inconsistencies;

(c) whether the data collected by operators under Article 6(1) of Regulation (EU) No 517/2014 of the European Parliament and of the Council (¹⁰) were made use of and how;

(d) the reasons why the checks were not considered to be relevant, where those checks were not performed.

Article 17

Reporting on consistency with energy statistics

1. **Contracting Parties** shall report information on the results of the checks referred to in point (j)(iii) of Part 1 of Annex V to Regulation (EU) 2018/1999 **as adapted and adopted by Ministerial Council Decision 2021/14/MC-EnC** in a textual format, specifying the differences between the reference approach calculated on the basis of the data included in the greenhouse gas inventory and the reference approach calculated on the basis of the energy statistics reported pursuant to Article 4 and Annex B to Regulation (EC) No 1099/2008 of the European Parliament and of the Council (11).

2. **Contracting Parties** shall report the quantitative information and explanations for differences of more than +/-2 % in the total national apparent fossil fuel consumption at aggregate level for all fossil fuel categories for the year X-2 referred to in paragraph 1 in accordance with Annex XIV to this Regulation.

Article 18

Reporting on changes in descriptions of national inventory systems or registries

Contracting Parties shall clearly state in the relevant chapters of the national inventory report if there were no changes in the description of their national inventory systems or, if applicable, of their national registries referred to in points (k) and (l) of Part 1 of Annex V to Regulation (EU) 2018/1999 **as adapted and adopted by Ministerial Council Decision 2021/14/MC-EnC** since the previous submission of the national inventory report.

Article 19

<...>

| Article 20 |
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| Article 21 <> |
| Article 22 <> |
| Article 23 <> |
| Article 24 <> |

Timescales for cooperation and coordination in preparing the Energy Community greenhouse gas inventory <...>

1. **Contracting Parties** and the **Energy Community Secretariat** shall cooperate and coordinate in preparing the **Energy Community** greenhouse gas inventory and of the **Energy Community** inventory report in accordance with the timescales set out in Annex XXI.

2. When a **Contracting Party** re-submits its inventory to the UNFCCC Secretariat that **Contracting Party** shall provide the **Energy Community Secretariat** with a summary of the changes made in the re-submitted inventory, no later than within one week of the re-submission.

3. **<...>**

CHAPTER IV

REQUIREMENTS ON THE ESTABLISHMENT, OPERATION AND FUNCTIONING OF NATIONAL INVENTORY SYSTEMS

Article 26

Functions of national inventory systems

In the implementation of the national inventory systems pursuant to Article 37 of Regulation (EU) 2018/1999 as adapted and adopted by Ministerial Council Decision 2021/14/MC-EnC, each Contracting Party shall:

(a) establish and maintain the institutional, legal and procedural arrangements necessary to perform the functions pursuant to Articles 27 to 29, between the government agencies and other entities responsible for the performance of all functions;

(b) ensure sufficient capacity for timely performance of the functions pursuant to Articles 27 to 29, including data collection for estimating anthropogenic GHG emissions by sources and removals by sinks and arrangements for technical competence of the staff involved in the inventory development process.

Article 27

Inventory planning

1. As part of its inventory planning, each Contracting Party shall:

(a) designate a single national entity with overall responsibility for the national inventory and make available its postal and electronic addresses;

(b) define and allocate specific responsibilities in the inventory development process, including those relating to choice of methods, data collection, particularly activity data and emission factors from statistical services and other entities, processing and archiving, and quality control and quality assurance;

(c) elaborate an inventory quality assurance and quality control plan which describes specific quality control procedures to be implemented during the inventory development process, facilitate the overall quality assurance procedures to be conducted and establish quality objectives;

(d) consider establishing processes for the official consideration and approval of the inventory, if relevant including any recalculations, prior to its submission and to respond to any issues raised by the inventory review processes.

2. As part of its inventory planning, each **Contracting Party** shall where relevant consider ways to improve the quality of activity data, emission factors, methods and other relevant technical elements of inventories. Information obtained from the implementation of the quality assurance and quality control plan, from reviews under Article 19 of Regulation (EU) No 525/2013, Article 38 of Regulation (EU) 2018/1999 as adapted and adopted by Ministerial Council Decision 2021/14/MC-EnC and under the UNFCCC shall where appropriate be considered in the development and/or revision of the quality assurance and quality control plan and the quality objectives.

Inventory preparation

1. In accordance with the greenhouse gas inventory guidelines, each Contracting Party shall:

(a) identify key categories and prepare estimates applying appropriate methods to estimate emissions and removals from key categories;

(b) collect sufficient activity data, process information and emission factors necessary to support the methods selected for estimating anthropogenic GHG emissions by sources and removals by sinks;

(c) make a quantitative estimate of inventory uncertainty for each category and for the inventory in total and prepare recalculations of previously submitted estimates of anthropogenic GHG emissions by sources and removals by sinks;

(d) compile the national inventory and implement general inventory quality control procedures in accordance with their quality assurance and quality control plan.

2. As part of its inventory preparation, each Contracting Party shall where appropriate:

(a) apply category-specific quality control procedures for key categories and for individual categories where significant methodological and/or data revisions have occurred, in accordance with the greenhouse gas inventory guidelines;

(b) provide for a basic review of the inventory by an independent third party or personnel not involved in the inventory development, before the submission of the inventory, in accordance with the planned quality assurance procedures referred to in Article 27(1)(c);

(c) provide for a more extensive review for key categories and categories where significant changes in methods occurred;

(d) based on the reviews according to the transparency MPGs and in accordance with Article 38 of Regulation (EU) 2018/1999 **as adapted and adopted by Ministerial Council Decision 2021/14/MC-EnC** and periodic internal evaluations of the inventory preparation process, re-evaluate the inventory planning process in order to meet the established quality objectives referred to in Article 27(1)(c) of this Regulation.

Article 29

Inventory management

1. As part of their inventory management, each Contracting Party shall:

(a) each year for the reported time series, archive inventory information including: all disaggregated emission factors, activity data, and documentation about how these were generated and aggregated; internal documentation on quality assurance and quality control procedures, external and internal reviews, documentation on annual key sources and key source identification and planned inventory improvements.

(b) provide review teams under the transparency MPGs and Article 38 of Regulation (EU) 2018/1999 as adapted and adopted by Ministerial Council Decision 2021/14/MC-EnC with access to all archived information used by the Member State to prepare the inventory, taking into account country-specific confidentiality rules.

(c) respond to requests for clarifying inventory information resulting from the different stages of the review processes of the inventory information, and information on the national system, in a timely manner.

2. As part of their inventory management, each **Contracting Party** shall where appropriate make the collection of archived information easily accessible

CHAPTER V

PROCEDURE AND SCHEDULE FOR CARRYING OUT THE COMPREHENSIVE RE-VIEW

Article 30

Procedure for the comprehensive review

1. When conducting the comprehensive review (or 'review') referred to in Article 38(1) of Regulation (EU) 2018/1999 as adapted and adopted by Ministerial Council Decision 2021/14/MC-EnC, the Energy Community Secretariat and the European Environment Agency shall be assisted by a technical experts review team and follow the procedure set out in Annex XXII.

2. The European Environment Agency shall perform the secretarial tasks for the comprehensive reviews as specified in Annex XXII.

3. The **Energy Community Secretariat**, assisted by the European Environment Agency, shall select a sufficient number of review experts to cover the appropriate inventory sectors. The review experts selected shall have experience in the area of greenhouse gas inventories compilation and, where possible, be active in greenhouse gas review processes. Technical experts who have contributed to the compilation of an individual **Contracting Party**'s greenhouse gas inventory, or are national of that **Contracting Party**, shall not take part in the review of that inventory.

4. The comprehensive reviews shall be carried out as desk-based and centralized reviews, as specified in Annex XXII. In addition, in-country visits may be organised upon recommendation of the technical experts review team and in consultation with the **Contracting Party** concerned.

5. The checks pursuant to Article 38(2)(b) of Regulation (EU) 2018/1999 as adapted and adopted by Ministerial Council Decision 2021/14/MC-EnC shall include, where appropriate, information specified in Annex XXII.

6. The checks referred to in Article 38(2)(c) of Regulation (EU) 2018/1999 **as adapted and adopted by Ministerial Council Decision 2021/14/MC-EnC** shall include, where appropriate, a detailed examination on consistency of the accounted emissions and removals with Union rules.

7. The comprehensive reviews shall include, where appropriate, checks to identify whether areas of improvement identified for one **Contracting Party** in the UNFCCC or **Energy Community** reviews may also constitute an area of improvement for other **Contracting Parties**.

8. The review of greenhouse gas inventories shall be performed consistently for all **Contracting Parties** concerned and in an objective manner.

Technical corrections

1. A technical correction of an emission estimate within the meaning of Article 38(2)(d) of Regulation (EU) 2018/1999 **as adapted and adopted by Ministerial Council Decision 2021/14/MC-EnC** shall be deemed necessary if an underestimate or overestimate exceeds the threshold of significance established in paragraph 2 of this Article. Details of the technical corrections are specified in Annex XXII to this Regulation.

2. The threshold of significance for a given source or sink amounts to 0,05 % of a **Contracting Party**'s total national greenhouse gas emissions without LULUCF for the year of the inventory under review, or 500 kt CO_2 equivalent, whichever is smaller.

3. In response to a finding by the **Energy Community Secretariat** communicated to a **Contracting Party** during the review, the **Contracting Party** may request a change of their estimates of emissions or accounted emissions and removals by providing revised estimates. If a revised estimate is deemed appropriate by the technical review team, it shall be included in the review report referred to in Article 32 and accompanied by a justification.

Article 32

Final review reports

The **Energy Community Secretariat** shall inform the **Contracting Party** concerned of the end of the comprehensive review and provide the **Contracting Party** with a final review report by 30 August 2027 and 30 August 2032 respectively.

Article 33

Cooperation with Contracting Parties

1. Contracting Parties shall:

(a) participate in the review pursuant to the schedule set out in Annex XXII;

(b) nominate a National contact point for the **Energy Community**'s review;

(c) participate in and facilitate the organisation of an in-country visit, if needed;

(d) provide answers and additional information and comment on the review reports as relevant.

2. Upon request by the **Contracting Parties**, the **Energy Community Secretariat** shall include comments regarding the review findings in the final review report referred to in Article 32.

3. The **Energy Community Secretariat** shall inform the **Contracting Parties** of the composition of the technical experts review team selected pursuant to Article 30.

Schedule for the comprehensive reviews

The comprehensive review shall be carried out pursuant to the time schedule set out in Annex XXII.

CHAPTER VI

POLICIES AND MEASURES AND PROJECTIONS

Article 35

Submission processes for reporting

Contracting Parties shall use the e-platform referred to in Article 28 of Regulation (EU) 2018/1999 **as adapted and adopted by Ministerial Council Decision 2021/14/MC-EnC** and linked tools and templates of the Commission, assisted by the European Environment Agency pursuant to Article 42 of Regulation (EU) 2018/1999 **as adapted and adopted by Ministerial Council Decision 2021/14/ MC-EnC**, for the submission of the information pursuant to this Chapter.

Article 36

Reporting on national systems for policies and measures and projections

Contracting Parties shall provide the description of their national systems for reporting on policies and measures, or groups of measures, and projections referred to in point (a) of Annex VI to Regulation (EU) 2018/1999 **as adapted and adopted by Ministerial Council Decision 2021/14/MC-EnC** in the format set out in Annex XXIII to this Regulation.

Article 37

Reporting on national policies and measures

1. **Contracting Parties** shall report the information on their national policies and measures, or groups of measures, referred to in point (c) of Annex VI to Regulation (EU) 2018/1999 **as adapted and adopted by Ministerial Council Decision 2021/14/MC-EnC** in the formats set out in Annex XXIV to this Regulation.

2. Contracting Parties shall report the following information in a textual format:

(a) the updates relevant to their long-term strategies referred to in point (b) of Annex VI to Regulation (EU) 2018/1999 as adapted and adopted by Ministerial Council Decision 2021/14/MC-EnC;

(b) planned additional policies and measures referred to in point (d) of Annex VI to Regulation (EU) 2018/1999 as adapted and adopted by Ministerial Council Decision 2021/14/MC-EnC;

(c) links between different policies and measures and the contribution of those policies and measures to different projection scenarios, as referred to in point (e) of Annex VI to Regulation (EU) 2018/1999 as

adapted and adopted by Ministerial Council Decision 2021/14/MC-EnC.

Article 38 Reporting on national projections

Contracting Parties shall report the information on their national projections of anthropogenic greenhouse gas emissions by sources and removals by sinks, organised by gas or group of gases, referred to in Article 18(1)(b) and point (a) of Annex VII of Regulation (EU) 2018/1999 as adapted and adopted by Ministerial Council Decision 2021/14/MC-EnC in the format set out in Annex XXV to this Regulation.
 Contracting Parties shall provide the additional information on their national projections of anthropogenic greenhouse gas emissions by sources and removals by sinks referred to in Annex VII to Regulation (EU) 2018/1999 as adapted and adopted by Ministerial Council Decision 2021/14/MC-EnC in a textual format, specifying:

(a) <...>

(b) the results of the sensitivity analysis performed pursuant to point (d) of Annex VII of Regulation (EU) 2018/1999;

(1) for the total reported greenhouse gas emissions, together with a brief explanation of which parameters were varied and how;

(2) <...>

(c) the year of the inventory data (base year) and the year of the inventory report used as a starting point for the projections;

(d) the methodologies used for the projections, including a brief description of the models used and their sectoral, geographical and temporal coverage, references to further information on the models and information on data sources, key exogenous assumptions and on the parameters used; pursuant to point (e) of Annex VII of Regulation (EU) 2018/1999 **as adapted and adopted by Ministerial Council Decision 2021/14/MC-EnC**.

3. In the reports on projections to be provided pursuant to Article 18(1) of Regulation (EU) 2018/1999 **as adapted and adopted by Ministerial Council Decision 2021/14/MC-EnC, Contracting Parties** shall take into account the harmonised values for key parameters for projections – at least for oil, gas, and coal import prices as well as for carbon prices under **national mechanism or carbon price mechanism** – which the **Secretariat** has recommended, in consultation with the Contracting Parties, 12 months before the deadline for submission of the reports.

CHAPTER VII TRANSITIONAL AND FINAL PROVISIONS

Article 39

<...>

Article 40

<...>

Article 41 Entry into force and application

This decision shall enter into force on the date of its adoption.

ANNEX I

Information on national adaptation actions pursuant to Article 4

- 1. National circumstances, impacts, vulnerabilities, risks and adaptive capacity¹
- 1.1 National circumstances relevant to adaptation actions:
 - a) biogeophysical characteristics;
 - b) demographics;
 - c) economy and infrastructure.
- 1.2 Climate monitoring and modelling framework:
 - a) main activities on climate monitoring, modelling, projections and scenarios;
 - b) main approaches, methodologies and tools, and associated uncertainties and challenges.
- 1.3 Assessment of climate impacts, vulnerability and risks, including adaptive capacity:
 - a) overview of observed climate hazards among the ones listed in Table 1² and existing pressures³;
 - b) identification of key future climate hazards from the ones listed in Table 1 and key affected sectors⁴

| Temperature-related | Wind-related | Water-related | Solid mass-related |
|--------------------------|--------------------|--------------------------|-----------------------|
| Changing temperature | Changing wind pat- | Changing precipitation | Coastal erosion |
| (air, freshwater, marine | terns | patterns and types | |
| water) | | (rain, hail, snow/ice) | |
| | | Precipitation and/or | Soil degradation (in- |
| | | hydrological variability | cluding de |
| Temperature variability | | Ocean acidification | Soil erosion |
| Permafrost thawing | | Saline intrusion | Solifluction |
| | | Sea level rise | |
| | | Change in sea ice cover | |
| | | Water scarcity | |
| Heat wave | Cyclone | Drought | Avalanche |

Table 1 - Classification of climate-related hazards⁵

^{1 &#}x27;Adaptive capacity' as defined in the Fifth Assessment Report of the United Nations Intergovernmental Panel on Climate Change (IPCC AR5): 'The ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or to respond to consequences.'

² The list is not exhaustive.

³ Contracting Parties shall report existing environmental, economic and social pressures that are likely to be significantly affected by climate change: e.g. loss of biodiversity, poor harvest, energy poverty, unemployment, migration.

⁴ Contracting Parties shall select key sectors among the following: Agriculture and food, biodiversity (including ecosystem-based approaches), buildings, coastal areas, civil protection and emergency management, energy, finance and insurance, forestry, health, marine and fisheries, transport, urban, water management, ICT (information and communications technology), land use planning, business, industry, tourism, rural development, other [please specify].

⁵ Where relevant, **Contracting Parties** shall also consider secondary effects of these hazards, such as forest fires, spread of invasive species and tropical diseases, cascading effects, and multiple hazards occurring at the same time.

| Cold wave/frost | Storm (including bliz- zards, dust and sand storms) | Heavy precipitation (rain, hail, snow/ice) | Landslide |
|-----------------|---|--|------------|
| Wildfire | Tornado | Flood (coastal, fluvial, pluvial, ground water, flash) | Subsidence |
| | | Snow and ice load | |
| | | Glacial lake outburst | |

c) For each key affected sector, overview of the following, rated on qualitative scales of high/medium/ low/not applicable, with accompanying explanation as appropriate⁶:

i. observed impacts of key hazards, including changes in frequency and magnitude;

ii. likelihood of the occurrence of key hazards and exposure to them under future climate, drawing upon the best available climate modelling science;

iii. vulnerability, including adaptive capacity;

iv. risk of potential future impacts.

2. Legal and policy frameworks and institutional arrangements

2.1 Legal and policy frameworks and regulations, including National Adaptation Strategies (NAS), National Adaptation Plans (NAP)⁷ and any sectoral adaptation plans.

2.2 Overview of institutional arrangements and governance at the national level for:

a) assessing climate vulnerability and risks;

b) planning, implementing, monitoring, evaluating and revising adaptation policy⁸;

c) integrating climate change impacts and resilience into environmental assessment procedures;

d) collection, ownership and re-use of relevant data (such as climate-related disaster loss data or risk data) and access to it;

e) integrating climate change impacts and adaptation planning into disaster risk management frameworks and vice versa⁹.

2.3 Overview of institutional arrangements and governance at the sub-national¹⁰ (¹⁰) level:

a) legal requirements and strategic documents;

b) networks or other collaborations on adaptation across national authorities;

c) good practice examples of networks or other collaborations on adaptation across local and regional authorities.

9 <...>

⁶ The analysis outlined in points (i) to (iv) shall apply the best available science for vulnerability and risk analysis by the Intergovernmental Panel on Climate Change and the latest Commission guidance on the climate proofing of the Union-funded projects.

⁷ Contracting Parties shall report the title, year of adoption and status [superseded / adopted / completed and submitted for adoption / being developed] of each NAS and NAP.

⁸ Aspects to consider include decision making, planning and coordination related to adaptation strategies, policies, plans and goals, addressing cross-cutting issues, adjusting adaptation priorities and activities, implementing adaptation actions, including facilitating action to avert, minimise and address the adverse effect of climate change.

¹⁰ Throughout the Annex, 'sub-national' refers to local and regional.

3. Adaptation strategies, policies, plans and goals

- 3.1 Adaptation priorities
- 3.2 Challenges, gaps and barriers to adaptation¹¹

3.3 Summaries of national strategies, policies, plans and efforts, with a focus on goals and objectives, foreseen actions¹², budget and timeline¹³

3.4 Overview of the content of sub-national strategies, policies, plans and efforts

3.5 Overview of efforts to integrate climate change adaptation into sectoral policies, plans and programs, including disaster risk management strategies and action plans

3.6 Stakeholder engagement

Overview of measures in adaptation policy at the national level and good practice examples from the sub-national levels to engage with:

- a) stakeholders particularly vulnerable to climate change impacts;
- b) the private sector¹⁴.

4. Monitoring and evaluation of adaptation actions and processes

- 4.1 Monitoring and evaluation methodology¹⁵ related to:
 - a) reducing climate impacts, vulnerabilities, risks, and increasing adaptive capacity;
 - b) implementation of adaptation actions.

4.2 State of play of the implementation of measures planned under points 3.3 to 3.6, including an overview of the subnational level and the disbursement of funding to increase climate resilience. The reporting on funding shall cover:

- a) spending earmarked for climate adaptation including in disaster risk management;
- b) to the extent possible, the share of spending used to support climate adaptation¹⁶ in each sector¹⁷.

4.3 Evaluating progress towards the following¹⁸:

- a) reducing climate impacts, vulnerabilities and risks;
- b) increasing adaptive capacity;
- c) meeting adaptation priorities;
- d) addressing barriers to adaptation.
- 4.4 Steps taken to review and update the following:

a) vulnerability and risk assessments;

12 Including nature-based solutions and actions leading to mitigation co-benefits and other relevant co-benefits

13 The summaries shall cover also efforts to build resilience and avert, minimise and address the adverse consequences of climate change, and include an explanation how gender perspectives have been taken into account.

14 Contracting Parties shall provide an overview of available information on private sector plans, priorities, actions and programmes, public/ private partnerships, and other relevant private adaptation initiatives and/or projects.

¹¹ Including those institutional, governance-related and other barriers that restrict the adaptive capacity as identified in the vulnerability assessment.

¹⁵ Contracting Parties shall report on approaches, systems used, transparency and indicators.

¹⁶ The additional investment that makes a project (that would have been realised anyway) climate resilient.

¹⁷ Contracting Parties shall report on investment in adaptation actions by the following sectors: Agriculture and food, biodiversity (including ecosystem-based approaches), buildings, coastal areas, civil protection and emergency management, energy, finance and insurance, forestry, health, marine and fisheries, transport, urban, water management, ICT (information and communications technology), land use planning, business, industry, tourism, rural development; other [please specify].

¹⁸ Based on the monitoring and evaluation methodology as reported under point 4.1.

b) national adaptation policies, strategies, plans, and measures.

4.5 Overview of good practice with regard to steps taken to review and update subnational adaptation plans, policies, strategies and measures.

5. Cooperation, good practices, synergies, experience and lessons learned in the field of adaptation

5.1 Good practices and lessons learnt, including at sub-national level¹⁹

5.2 Synergies of adaptation actions with other international frameworks and/or conventions, in particular the Sustainable Development Goals and the Sendai Framework for Disaster Risk Reduction

5.3 Cooperation with **Contracting Parties** <...> Member States **of the European Union**, international cooperation, and with regional and international organisations²⁰:

a) cooperation to share information and to strengthen science, institutions and adaptation knowledge;

b) cooperation to enhance adaptation action at the sub-national, national, macro-regional and international level, including the area, scale and types of cooperation.

6. Any other information related to climate change impacts and adaptation

6.1 Key contact details of national coordinator and organisation

6.2 Relevant websites and social media sources used for communication on adaptation action at national and sub-national level, as appropriate

6.3 Key reports and publications at national and sub-national level

6.4 Any other relevant information.

19 Contracting Parties may report on the good practices and lessons learnt in the following areas, when relevant: Climate modelling activities and methodologies; assessment of climate impacts, vulnerability and risks to climate change, including adaptive capacity; institutional arrangements and governance at the national level; policy and regulatory changes; coordination mechanisms; adaptation priorities; adaptation barriers; adaptation goals, objectives, undertakings, efforts, strategies, policies and plans; efforts to integrate climate change adaptation into development and sectoral policies, plans and programs; integration of gender perspectives into climate adaptation; integration of indigenous, traditional and local knowledge into climate adaptation; stakeholder engagement; climate risk communication, monitoring and evaluation; strengthening scientific research and knowledge; disaster risk reduction and management, innovative adaptation solutions and innovative financing mechanisms.
20 Excluding information on support to developing countries referred to in Part 2 of Annex VIII of Regulation (EU) 2018/1999.

ANNEX II

Information on the use of carbon price mechanism revenues pursuant to Article 5

| 1 | | A | Amount for the year X-1 | |
|---|--|--------------|---|--|
| 2 | | 1 000 Euros | 1 000 in domestic currency, if applica- ble (1) | Comments (e.g. explain gaps, relevant national circumstances, changes since last reporting) |
| 3 | A | В | С | D |
| 4 | Total amount of revenues generated from carbon price mechanism (sum of rows 5 and 6) | Sum of B5+B6 | Sum of C5+C6 | |
| 5 | Of which amount of revenues generated from auctioning of allowances pursuant to Article 10 of Directive 2003/87/EC | | | |
| 6 | Of which amount of revenues generated from auctioning of allowances pursuant to Arti- cle 3d(1) or (2) of Directive 2003/87/EC | | | |

Table 1a: Revenues generated from carbon price mechanism in year X-1

Notes:

(1) An average annual exchange rate for the year X-1 or the real exchange rate applied to the amount disbursed shall be used for the currency conversion.

| 1 | | Tota disk the | l amount oursed in year X-1 | O ^r a disk yea rep com | f which mount bursed in r X-1 and orted as mitted in years fore X-1 | Total com bi disb the | l amount nmitted, ut not ursed, in year X-1 | Eq finar use yea | uivalent icial value id in the ar X-1 ⁽²⁾ | |
|---|--|---------------------|---|--|--|-----------------------------------|---|---------------------------|---|--|
| 2 | | 1 000 Euros | 1 000 in domestic currency, if applicable ⁽¹⁾ | 1 000 Euros | 1 000 in domestic currency, if applicable ⁽¹⁾ | 1 000 Euros | 1 000 in domestic currency, if applicable ⁽¹⁾ | 1 000 Euros | 1 000 in domestic currency, if applicable ⁽¹⁾ | Comments (e.g. explain gaps, relevant national circumstances, changes since last reporting) |
| 3 | А | В | С | D | E | F | G | н | Ι | J |
| 4 | Total amount of revenues from carbon price mechanism or equivalent financial value used for the purposes specified in paragraph 3 of Article 10, and Arti- cle 3d(4) of Directive 2003/87/EC | | | | | | | | | |
| 5 | Of which amount of revenues auctioning of allowances used for the purposes specified in Article 10(3) of Directive 2003/87/EC (if data are avail- able for separate reporting) | | | | | | | | | |
| 6 | Of which amount of revenues auctioning of allowances used for the purposes specified in Arti- cle 3d(4) of Directive 2003/87/ EC (if data are available for separate reporting) | | | | | | | | | |

Table 1b: Use of revenues from carbon price mechanism in year X-1

Notation: x = reporting year

Notes:

(1) An average annual exchange rate for the year X-1 or the real exchange rate applied to the amount disbursed shall be used for the currency conversion.

(2) By reporting 'equivalent financial value', **Contracting Parties** report values which are representative for their spending in accordance with Articles 3d and 10 of Directive 2003/87/EC, and indicate that all values reported in Tables 2 to 6 also represent equivalent financial value.

| lotes: |
|--------|
| |
| |
| |
| |
| |

Notation: x = reporting year

financial value

used

column D Sum of

> of column C

Sum

Total amount or equivalent of revenues

Q

(1) An average annual exchange rate for the year X-1 or the real exchange rate applied to the amount disbursed shall be used for the currency conversion.

(2) Contracting Parties shall provide the definitions used for 'commitment' and 'disbursement' as part of their report. If part of the reported amount is committed and another part disbursed related to a specific programme/project, two separate rows should be used. If **Contracting Parties** are not able to distinguish between committed and disbursed amounts, the most appropriate category should be selected for the reported amounts. Consistent definitions should be used across the Tables. Generally, 'committed' auction revenues are those which have been legally committed to be used for climate and energy purposes, but in some cases may not have yet been spent at the time of reporting. 'Disbursed' auction revenues are those which have been spent at the time of reporting. However, in some cases, 'Commitment' can refer to revenues that are only preliminarily planned to be used and 'disbursement' are those which have been transferred to a specific State Agency for a specific purpose or to a regional government.

(3) Categories of uses mentioned in Article 10(3) of Directive 2003/87/EC as follows:

— funding of research and development and demonstration projects for reducing emissions and for adaptation;

| Tabl | e 2: | Use of | revenues | from ca | arbon p | rice mec | hanism | for o | domestic | <> | purposes | <> |
|------|------|--------|----------|---------|---------|----------|--------|-------|----------|----|----------|----|
|------|------|--------|----------|---------|---------|----------|--------|-------|----------|----|----------|----|

tative inforspecific uses

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outlined in 2003/87/EC

2003/87/EC of Directive

of Directive 2003/87/EC port policy,

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project title

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(e.g.

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Select type of use as

Article 10

Article 3d

Committed disbursed)/

responsible ministry)

ed: fiscal,

Comments

Imple-

Type of use

Revenues pursuant to [tick

Status (2)

Amount for year X-1

description

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Purpose for which

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— funding of initiatives within the framework of the European Strategic Energy Technology Plan and the European Technology Platforms;

- development of renewable energies to meet the commitment of the Union;
- development of other technologies contributing to the transition to a safe and sustainable low-carbon economy;
- development of technologies that help meet the commitment of the Union to increase energy efficiency;
- forestry sequestration in the Union;
- environmentally safe capture and geological storage of CO₂;
- encouragement of a shift to low-emission and public forms of transport;
- financing of research and development in energy efficiency and clean technologies;

---- measures intended to increase energy efficiency and insulation or to provide financial support in order to address social aspects in lower and middle income house-holds;

- coverage of administrative expenses of the management of the EU ETS;
- promotion of skill formation and reallocation of labour in order to contribute to a just transition to a low carbon economy;
- other reduction of greenhouse gas emissions;
- adaptation to the impacts of climate change;
- other domestic uses.

Categories mentioned in Article 3d(4) of Directive 2003/87/EC, but not specifically mentioned in Article 10(3) as follows:

- funding of common projects to reduce greenhouse gas emissions from the aviation sector;
- measures to avoid deforestation.

Contracting Parties shall avoid double counting of amounts in this Table. If a specific use fits to several types of uses, several types can be selected; however, the amount indicated is not to be multiplied but additional rows for types of uses are to be linked with one entry field for that amount.

(4) Several categories can be selected if several financial instruments are relevant for the reported programme or project.

| Table 3 |
|---------|
| <> |
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| Table 4 |
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| <> |
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| Table 5 |
| <> |
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| Table 6 |
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| <> |

| | inc | luding te | chnology | developn | nent and | transfer a | nd capad | city build | ing wher | e relevan | t (1) (2) | | |
|---|-----------------------|---|--------------------------|--|--|--|---------------------------------|---------------------------|-------------------------------------|-------------------------|--|-------------------------------------|--|
| Channel | Recipient | Title of activity/ program/ project or other* | Funding source | Financial instru- ment | Type of support | Sector | Com- mitted amount (a) | Provided amount (a) | Grant equiva- lent* (a)(b) | Sub- sector * (c) | Tech- nology transfer/ Capacity Building* (d) | Additional Informa- tion* (e) | |
| Bilateral/ Regional/ Other (specify) | | | 0DA/ 00F/ (specj§) | Grant/ Conces- sional Ioan/ Non- conces- sional loan/ Equity/ Guar Other Other (specify) | Adapta- tion/ Mit- igation/ Cross- cutting | Energy/ Transport/ Industry/ Agri- Coulture/ Forestry/ Water and cross-cut- ting/ Other (specify) | | | | | T/ C/ Both/ N//A | | |
| Notes: | | | | | | | | | | | | | |
| (1) The infor | mation elem | ients marked | with '*' shall | l be complete | ed as availabl | e. | | | | | | | |
| (2) The infor | mation shall | be reported | per calendar | year (X-1). | | | | | | | | | |
| (a) Amo | unt shall be i | eported in d | omestic curre | ency. | | | | | | | | | |
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Information on financial and technology support provided to developing countries pursuant to Article 6(1)

ANNEX III

(b) This information is to be provided as reported to the UN or the Organisation for Economic Cooperation and Development (OECD) in accordance with any internationally agreed information requirements. (c) The five-digit purpose codes introduced by the OECD Development Assistance Committee for reporting to the Creditor Reporting System (DAC CRS) may be used when reporting sub-sector information.

(d) **Contracting Parties** shall indicate "T' if the activity contributes to technology development and transfer objectives, 'C' if it contributes to capacity building objectives, 'Both' if cross-cutting and 'N/A' if not applicable.

(e) Additional information shall be provided, such as a link to relevant program documentation or a description of the project.

Table 1: Provision of support committed and provided of public resources through bilateral and regional channels,

Table 2: Provision of support committed and provided of public financial resources through multilateral channels, including technology development and transfer and capacity building where relevant ^{(1) (2)}

| Grant equiva- lent * (a)(b) | |
|--|--|
| Recipient* | Global/ Regional/ Country |
| Provided amount (a) (Climate- spe- cific) | |
| Committed Amount (a) (Climate- spe- cific | |
| Provided amount (a) (Core/ gen- eral) | |
| Committed Amount (a) (Core/ gen- eral) | |
| Financial instrument | Grant/ Conces- sional loan/ Non-conces- sional loan/ Equity/ Guaran- tee/ Insurance/ Other (specify) |
| Funding source | ODA/ OOF/ Other (specify) |
| Title of activ- ity/ program/ project or other* | |
| Multilateral institution | |
| Channel | Multilateral Multi- bilat- eral/ Other (specify) |

| Imputed multilateral contribution* (d) | Financial instrument | Type of support* | Sector* | Sub-Sector* (e) | Technology transfer/ Capacity building* (f) | Additional Information* (g) |
|--|--|---|---|-----------------|--|--------------------------------|
| Yes/ No/ N/A | Granty Concessional Ioan/ Non-concession- al Ioan/Equity/ Guar- antee/ Insurance/Policy intervention/ Other (specify) | Adaptation/ Mitiga- tion/Cross-cutting | Energy/ Transport/ Industry/Agriculture/ Forestry/ Water and sanitation/ Cross-cut- ting/ Other | | | |
| Nictor: | | | - | - | - | |

Notes:

(1) The information elements marked with '*' shall be completed as available.

(2) The information shall be reported per calendar year (X-1).

(a) Amount shall be reported in domestic currency.

(b) This information is to be provided as reported to the UN or OECD in accordance with any internationally agreed information requirements.

(c) Contracting Parties shall indicate if the amount reported is based on the 'inflow contribution' to the multilateral institution or on the 'outflow share' of the multilateral institution's financial resources.

(d) Contracting Parties shall indicate if the 'climate-specific' amount is calculated following the OECD Imputed Multilateral Shares.

(e) The OECD-DAC CRS five-digit purpose codes may be used when reporting sub-sector information.

(f) Contracting Parties shall indicate "T' if the activity contributes to technology development and transfer objectives, 'C' if it contributes to capacity building objectives, 'Both' if cross-cutting and 'N/A' if not applicable.

(g) Additional information shall be provided, such as a link to relevant program documentation and description of the project.

| Additional Information* (d) | |
|---|---|
| Amount of resources used to mobilise the support* | |
| Grant equivalent* (a) (c) | |
| Sub-sector* (b) | |
| Amount mo- bilised (a) | |
| Sector | Energy/ Transport/ Industry/ Forestry/ Water and sanitation/ Crosscutting/ Other (specify) |
| Type of support | Adaptation/ Mitigation/ Crosscutting |
| Type of public intervention | Grant/ Conces- sional loan/ Non-conces- sional loan/ Equity/ Guar- ance/ Capac- ity building/ Technology development and transfer/ Other (specify) |
| Title of activity/ program/ project or other* | |
| Recipient | Global/ Region/ Country |
| Channel | Bilateral/ Regional/ Other (specify) |

Table 3: Information on financial support mobilised through public interventions (1) (2)

Notes:

(1) The information elements marked with '*' shall be completed as available.

(2) The information shall be reported per calendar year (X-1).

(a) Amount shall be reported in domestic currency.

(b) The OECD-DAC CRS five-digit purpose codes may be used when reporting sub-sectoral information.

(c) This information is to be provided as reported to the UN or OECD in accordance with any internationally agreed information requirements.

(d) Additional information shall be provided, such as a link to relevant program documentation or a description of the project.

Template 1: Information on financial support mobilised through public interventions per activity (1) (2) to be used in cases where it is impossible for a **Contracting Party** to fill in Table 3

Title of activity/program/project or other

1. Channel

2. Recipient

3. Type of public intervention

4. Type of support

5. Sector

6. Amount mobilised (a)

7. Sub-sector* (b)

8. Grant equivalent* (a)(c)

9. Amount of resources used to mobilise the support*

10. Addition information* (d)

Notes:

(1) The information elements marked with '*' shall be completed as available.

(2) The information shall be reported per calendar year (X-1).

(a) Amount shall be reported in domestic currency

(b) The OECD-DAC CRS five-digit purpose codes may be used when reporting sub-sector information.

(c) This information is to be provided as reported to the UN or OECD in accordance with any internationally agreed information requirements.

(d) Additional information shall be provided, such as a link to relevant program documentation or a description of the project.

ANNEX IV

Qualitative methodological information pursuant to Article 6(2)

Template 1: Provision of qualitative methodological information as applicable and other information on definitions and methodologies

1. Climate finance

2. New and additional

3. Developing Country

4. Core/general

5. Climate-specific

6. Financial instruments (e.g. grant, concessional loan, non-concessional loan, equity, guarantee, insurance, other (specify))

7. Funding source (ODA, OOF, other)

8. Status (committed and provided)

9. Support mobilised (e.g. (i) Identifying a clear causal link between a public intervention and mobilized private finance, where the activity would not have moved forward, or moved forward at scale, in the absence of the Party's intervention; (ii) Providing information on the point of measurement (e.g. point of commitment, point of disbursement) of the private finance mobilized as a result of the public intervention, to the extent possible in relation to the type of instrument or mechanism used for the mobilization; (iii) Providing information on the boundaries used to identify finance as mobilized by public intervention)

10. Sector, sub-sector

11. Type of support (climate mitigation/ climate adaptation/ cross-cutting)

12. Public finance/private finance (e.g. in particular where entities or funds are mixed)

13. Application of Rio Markers (coefficients)

14. Determining grant-equivalent component of support provided and support mobilised when grant-equivalent information has been reported

15. Methodologies used to determine figures on support mobilized

16. How double counting was avoided between the resources reported as committed or provided, and the resources used in accordance with Article 6 of the Paris Agreement by the acquiring Party for use towards the achievement of its Nationally Determined Contribution

17. A description of the systems and processes used to identify, track, and report on support committed, provided and mobilised through public interventions

18. A description of the national systems and institutional arrangements for the provision of information on planned provision of support, including information on planned activities related to public-funded technology transfer projects and capacity-building projects for developing countries under the UNFCCC

19. Information, as available, a description of national systems and institutional arrangements for the provision of technology transfer and capacity building support, including on the underlying assumptions, definitions and methodologies used to provide information on technology transfer and capacity-building support

20. Information on channels and barriers encountered, lessons learned and measures to taken to overcome them

21. Information on how it has been sought to ensure that support committed, provided and mobilised through public interventions is in line with the long-term goals of the Paris Agreement 22. Information on how support committed, provided and mobilised is targeted at helping developing countries in their efforts to meet the long-term goals of the Paris Agreement, including by assisting them in efforts to make financial flows consistent with a pathway towards low-greenhouse gas emissions and climate-resilient development

23. Information on how the information provided reflects a progression from previous levels in the provision of sup-port and mobilisation of finance under the Paris Agreement

24. How it seeks to ensure that support provided and mobilized through public interventions effectively addresses the needs and priorities of developing country Parties for the implementation of the Paris Agreement, as identified in country-driven strategies and instruments, such as biennial transparency reports, NDCs and national adaptation plans

25. Information on actions and plans to mobilise additional climate finance as part of the global effort to mobilise climate finance from a wide variety of sources, including on the relationship between the public intervention to be used and the private finance mobilised

26. Information on reporting on multilateral finance, including: (i) Whether the multilateral finance reported is based on the Party's inflow contribution to a multilateral institution and/or on the Party's share in the outflow of the multilateral institution; (ii) Whether and how multilateral finance has been reported as climate-specific and how the climate-specific share was calculated, including by, for example, using existing international standards; (iii) Whether multilateral finance has been reported as core/general, with the understanding that the actual climate finance amount it would transfer into depends on the programming choices of the multilateral institutions; (iv) Whether and how multilateral finance has been attributed to the reporting Party.

ANNEX V

Available information on the planned provision of support pursuant to Article 6(3)

Table: Available information on the planned provision of support

| Year/ period | Recipient (a) | Title of activity/ program/ | Projected amount to be provided (b) | Type of support | Technology transfer/ Capacity Building (c) | Additional Information (d) |
|-----------------|---------------------------|-----------------------------------|---|--|---|----------------------------------|
| | Global/Region/ Country | | | Mitigation/ Adaptation/ Cross-cutting | T/ C/ Both/ N/A | |

Notes:

(a) Contracting Parties shall provide information on the recipient country/region at the preferred level of disaggregation.

(b) Where possible, **Contracting Parties** shall provide the amount of support to be provided in domestic currency (recommended to provide face-value on a commitment basis).

(c) **Contracting Parties** shall indicate 'T' if the activity contributes to technology development and transfer objectives, 'C' if it contributes to capacity building objectives, 'Both' if cross-cutting and 'N/A' if not applicable.

(d) Additional information shall be provided, such as a link to relevant program documentation, a description of the project, or available information in accordance with Article 9(5) of the Paris Agreement.

Template 1: Available information on the planned provision of support per activity/program/project to be used in cases where it is impossible for a **Contracting Party** *to fill in Table 1*

Title of activity/program/project

1. Year

2. Recipient (a)

3. Projected amount to be provided (b)

4. Type of support

5. Technology transfer/Capacity Building (c)

6. Additional Information (d)

Notes:

(a) Contracting Parties shall provide information on the recipient country/region at the preferred level of disaggregation.

(b) Where possible, **Contracting Parties** shall provide the amount of support to be provided in domestic currency (recommended to provide face-value on a commitment basis).

(c) **Contracting Parties** shall indicate 'T' if the activity contributes to technology development and transfer objectives, 'C' if it contributes to capacity building objectives, 'Both' if cross-cutting and 'N/A' if not applicable.

(d) Additional information shall be provided, such as a link to relevant program documentation, a description of the project, or available information in accordance with Article 9(5) of the Paris Agreement.

ANNEX VI

Reporting on approximated greenhouse gas inventories pursuant to Article 7

| Memebr state: | |
|---------------------|--|
| Reported year 't-1' | |
| Reporting year 't' | |

| GREENHOUSE GAS SOURCE AND SINK CATEGORIES | CO ₂ (1) | CH4 | N ₂ O | HFCs | PFCs | ${\sf SF}_6$ | Unspecified mix of HFCs and PFCs | NF ₃ | Total | | ETS | Effort Sharing (3) | |
|--|------------------------|---------------------------------|------------------|------|------|--------------|--|-----------------|-------|---|---------------------------------|--------------------------|--|
| | | CO ₂ equivalent (kt) | | | | | | | | | CO ₂ equivalent (kt) | | |
| Total (net emissions) (1) | | | | | | | | | | | | | |
| 1. Energy | | | | | | | | | | | | | |
| A. Fuel combustion (sectoral approach) | | | | | | | | | | | | | |
| 1. Energy industries | | | | | | | | | | | | | |
| 2. Manufacturing industries and construction | | | | | | | | | | | | | |
| 3. Transport | | | | | | | | | | 1 | | | |
| 4. Other sectors | | | | | | | | | | 1 | | | |
| 5. Other | | | | | | | | | | 1 | | | |
| B. Fugitive emissions from fuels | | | | | | | | | | | | | |
| 1. Solid fuels | | | | | | | | | |] | | | |
| 2. Oil and natural gas | | | | | | | | | | | | | |
| C. CO ₂ transport and storage | | | | | | | | | | | | | |
| 2. Industrial processes and product use | | | | | | | | | | | | | |
| A. Mineral industry | | | | | | | | | | | | | |
| B. Chemical industry | | | | | | | | | | | | | |
| C. Metal industry | | | | | | | | | | | | | |
| D. Non-energy products from fuels and solvent use | | | | | | | | | | | | | |
| E. Electronic Industry | | | | | | | | | | | | | |
| F. Product uses as ODS substitutes | | | | | | | | | | | | | |
| G. Other product manufac- ture and use | | | | | | | | | | | | | |
| H. Other | | | | | | | | | | | | | |

| GREENHOUSE GAS SOURCE | CO ₂ (1) | CH ₄ | N ₂ O | HFCs | PFCs | ${\sf SF}_6$ | Unspecified mix of HFCs and PFCs | NF ₃ | Total | | ETS | Effort Sharing (3) |
|--|------------------------|-----------------|------------------|---------------------------------|------|--------------|--|-----------------|-------|---|-----|--------------------------|
| AND SINK CATEGORIES | | | | CO ₂ equivalent (kt) | | | | | | | | |
| 3. Agriculture | | | | | | | | | | | | |
| A. Enteric fermentation | | | | | | | | | | | | |
| B. Manure management | | | | | | | | | | | | |
| C. Rice cultivation | | | | | | | | | | | | |
| D. Agricultural soils | | | | | | | | | | | | |
| E. Prescribed burning of savannahs | | | | | | | | | | | | |
| F. Field burning of agricultur- al residues | | | | | | | | | | | | |
| G. Liming | | | | | | | | | | | | |
| H. Urea application | | | | | | | | | | | | |
| I. Other carbon-containing fertilizer | | | | | | | | | | | | |
| J. Other | | | | | | | | | | 1 | | |
| 4. Land use, land-use change and foresty (1) | | | | | | | | | | | | |
| A. Forest land | | | | | | | | | | 1 | | |
| B. Cropland | | | | | | | | | | 1 | | |
| C. Grassland | | | | | | | | | | | | |
| D. Wetlands | | | | | | | | | | | | |
| E. Settlements | | | | | | | | | | | | |
| F. Other lands | | | | | | | | | | | | |
| G. Harvested wood products | | | | | | | | | | | | |
| 5. Waste | | | | | | | | | | | | |
| A. Solid waste disposal | | | | | | | | | | | | |
| B. Biological treatment of solid waste | | | | | | | | | | | | |
| C. Incineration and open burning of waste | | | | | | | | | | | | |
| D. Waste water treatment and discharge | | | | | | | | | | | | |
| E. Other | | | | | | | | | | 1 | | |
| 6. Other (as specified in summary 1.A) | | | | | | | | | | | | |
| Memo items: | | | | | | | | | | | | |
| International bunkers | | | | | | | | | | | | |
| Aviation | | | | | | | | | |] | | |
| Navigation | | | | | | | | | | | | |
| | | | | | | | | | | | | |

| GREENHOUSE GAS SOURCE | CO ₂ (1) | CH ₄ | N ₂ O | HFCs | PFCs | ${\sf SF}_6$ | Unspecified mix of HFCs and PFCs | NF ₃ | Total | ETS | Effort Sharing (3) |
|---|---|-----------------|------------------|------|-----------------------|--------------|--|-----------------|-------|-----|--------------------------|
| AND SINK CATEGORIES | | | | | CO ₂ equiv | valent (kt) | | | | | |
| CO ₂ emission from biomas | | | | | | | | | | | |
| CO ₂ captured | | | | | | | | | | | |
| | | | | | | | | | | | |
| Indirect CO ₂ (2) | | | | | | | | | | | |
| Total CO ₂ equivalent er | Total CO ₂ equivalent emissions without land use, land-use change and forestry | | | | | | | | | | |
| Total CO ₂ equivalen | Total CO ₂ equivalent emissions with land use, land-use change and forestry | | | | | | | | | | |
| Total CO ₂ equivalent emissions, including indirect CO ₂ , without land use, land-use change and forestry | | | | | | | | | | | |
| Total CO ₂ equivalent emissions, including indirect CO ₂ , with land use, land-use change and forestry | | | | | | | | | | | |

Notes:

(1) For carbon dioxide (CO₂) from land use, land-use change and forestry the net emissions/removals are to be reported. For the purposes of reporting, the signs for removals are always negative (-) and for emissions positive (+).

(2) For **Contracting Parties** that report indirect CO₂ the national totals shall be provided with and without indirect CO₂.

(3) Emissions within the scope of Regulation (EU) 2018/842.

Brief description of the key drivers underpinning the increase or decrease in GHG emissions in x-1 (proxy) compared to x-2 (inventory). If this information is publicly available please include the hyperlink to the relevant website.

Information on the uncertainties associated with the estimations for the LULUCF sector may also be provided.

ANNEX VII

Overview of reporting on greenhouse gas inventories pursuant to Article 8(2) (1), (2)

| [Article of] This Regulation | Information to be provided in the National Inventory Report (tick) | Information to be provided in a separate annex to NIR (tick) | Reference to chapter in the NIR or in separate annex (specify) |
|---|---|---|--|
| Article 9 Reporting on recalculations | Obligatory | | Chapter of the NIR on 'Recal- culations and improvements' |
| Article 10 Reporting on implementation of recommendations in Table 1 of Annex VIII | Obligatory | Obligatory | Chapter of the NIR on recal- culations and improvements |
| Article 10 Reporting on implementation of recommendations in Table 2 of Annex VIII | Not applicable | Obligatory | |
| Article 12(1) Reporting on uncertainty | Not applicable | Obligatory | |
| Article 12(2) Reporting on completeness | Obligatory | Not applicable | In the respective table of the CRT and in the respective chapters of the NIR |
| Article 14(1) Reporting on consistency of reported emissions with data from the emissions trading scheme (Annex XII data) | Not applicable | Obligatory | |
| Article 14(2) Reporting on consistency of reported emissions with data from the emissions trading scheme (textual information) | Possible | Possible | If in the NIR: In the relevant sections of the NIR |
| Article 15 Reporting on consistency of the reported data on air pollutants | Possible | Possible | If in the NIR: Chapter of the NIR on 'quality assurance, quality control and verifica- tion plan' |
| Article 16 Reporting on consistency of the data reported on fluorinated greenhouse gases | Possible | Possible | If in the NIR: In the relevant sections of the NIR |
| Article 17 Reporting on consistency with energy statistics | Possible | Possible | If in the NIR: In the relevant sections of the NIR |
| Article 18 Reporting on changes in de- scriptions of national inventory systems or registries | Obligatory | Not applicable | In the relevant chapters of the NIR |

Notes:

(1) Information to be submitted by 15 January shall be submitted as draft chapters of the NIR or respective separate annexes.

(2) The entry 'possible' means that **Contracting Parties** shall choose whether to report the information either in the NIR or in a separate annex to the NIR.
ANNEX VIII

Reporting on implementation of recommendations pursuant to Article 10

 Table 1: Format for reporting information on the status of implementation of each

 recommendation listed in the most recently published individual UNFCCC review report,

 including reasons for not having implemented such a recommendation

| | Year of latest UNFCCC inventory review | | | | | | | | |
|------------------------|--|-----------------------------|--|---------------------------------------|----------------------------|--|--|--|--|
| CRT category/ issue | Review recom- mendation | Review report/ paragraph | Member State response/status of implementation | Reason for non-implemen- tation | Chapter/section in the NIR | | | | |
| | | | | | | | | | |

Table 2: Format for reporting information on the status of implementation of each recommendation, technical correction or revised estimate listed in the most recent review report pursuant to Article 35(2) of Commission Implementing Regulation No 749/2014 or to Article 32 of this Regulation

| | Year of latest Energy Community -internal inventory review | | | | | | | |
|--------------------|--|------------------------------|--|----------------------------|--|--|--|--|
| CRT category/issue | Review recommen- dation, technical correction or revised estimate | Review report/para- graph | Contracting Party response/status of implementation | Chapter/section in the NIR | | | | |
| | | | | | | | | |

ANNEX IX

| | | | | r | 1 |
|--------|---|--------------------------|--|--|--|
| | 0 | | | nunity ntified in nuary and | refer- ence (section number) to the toon in NIT (g) |
| Part 4 | Ν | ties | | ergy Comi gories ider A, by 15 Jar 15 March | Sum- many descrip- descrip- tions in the latest tory |
| | Σ | acting Par | | For En key cate column A | Sum- mary ological descrip- tions in the latest tory |
| | Γ | d by Contra | | dentified arch | tick to identify fir the emission factors actors in the latest in- ventory (column) de- from the from the emission in the emission in the in the invetory (column factors Used (column factors treed from the from the fro |
| | Х | be reported | | ategories id / and 15 M | tick to identify if the methods used istertin- ventory (column i) de- viate from the from the |
| Part 3 | ſ | mation to | | unity key o 15 January | Emission factors used in the Con- Party 's latest invento- ry (b) |
| | - | Infor | | gy Comm lumn B, by | Methods used con- tracting latest ry (b) |
| | н | | | For Ener in co | tick to identify as a new Energy Com - Com - key key key to the pared to the latest Energy Com - pared to the pared to the pared to the pared arest arest or to the pared or to the pared or to the pared or to the pared to the to the to the to the pared to the to the |
| | Ð | | gy Com- | February | refer- ence (section number) to the too in NIR (c) (g) |
| t 2 | F | etariat | o the Ener categories | and by 28 ۲ | Con- tracting Party's sum- mary mary mary descrip- tions in the latest invento- ry (c) |
| Par | Е | / the Secre | n related t nunity key | submission submissior | Emission factors used Con- Tracting Party is invento- ry (b) |
| | D | provided by | Informatic r | ous to the s it inventory | Methods used con- tracting latest invento- ry (b) |
| | υ | ation to be | nergy tegories | e year previ | tick to identify as a new Energy Com- Com- pared to the previous Com- previous green- house gas inven- tory tory |
| Part 1 | В | Informe | cation of E i nity key ca | tober of the | tick to identify key cate- gories where where informa- tion on methods and factors are not avail- able or reported by Con- by Con- the CRT the CRT |
| | A | | Identifi Commu | by 31 OC | List of Energy munity key ries (a) |

Reporting on inventory methods, emission factors and on related methodological descriptions for Energy Community key categories pursuant to Article 11

1eis, در₂.

(b) Notation keys (abreviations) for 'method applied' and 'emission factors' used in the common reporting tables' summary sheet on methods and emission factors used.

for the first time.

(c) Information of the previous year's description to be included by 31 October 2023,

(d) Column H is to be provided by the Commission.

(e) Information in column F is to be provided by the Commission by 31 October 2023, for the first time.

(f) Changes related to information reported in columns I, J, K and L shall only be reported, if applicable, for key categories identified in column B.

(g) 'Final NIR' means the latest available complete NIR submitted to the EU.

ANNEX X

| A | В | U | D | ш | ט | н | _ | - | × | | Σ |
|--|----------|--------------------------------------|--------------------------------------|---|-----------------------------------|---|--------------------|-----------------------------------|---|---|--|
| IPCC category | Gas | Base year emission or removals | Year x emis- sions or removals | Emission factor/ esti- mation parame- ter uncer- tainty | Com- bined uncer- tainty | Contri- bution to Variance by Cat- egory in Year x | Type A sensitivity | Type B sensitivity | Uncertainty in trend in national emissions introduced by emission factor/ estimation parameter uncertainty | Uncertainty in trend in national emissions introduced by activity data uncer- tainty | Uncertainty introduced into the trend in to- tal national emissions |
| | | Input data | Input data | Input data Note A | $\sqrt{E^2} + F^2$ | $\frac{(G * D)^2}{(\sum D)^2}$ | Note B | $\left \frac{D}{\Sigma c}\right $ | l * F Note C | J * E * 2 Note D | K ² + L ² |
| | | Gg CO ₂ equivalent | Gg CO ₂ equivalent | % | % | % | | % | % | % | % |
| E.g., 1.A.1. Energy industries fuel 1 | CO CO | | | | | | | | | | |
| E.g., 1.A.1. Energy industries fuel 2 | CO | | | | | | | | | | |
| Etc. | : | | | | | | | | | | |
| Total | | Σc | ΣD | | | | Σн | | | | ΣM |
| | | | | | Percentage nin total inv | uncertainty entory: | $\sqrt{\sum}^{H}$ | | | | $\sqrt{\sum_{M}}$ |
| Source: 2006 IPPC gu | ideline. | s, Volume 1, Ta | ble 3.2 Approa | ch 1 uncertaii | nty calculatio | Ę | | | | | |

Reporting on uncertainty and completeness pursuant to Article 12

ANNEX XI

Reporting on indicators pursuant to Article 13

| No | Nomen- clature in Eurostat energy efficiency indicators | Indicator | Numerator / denominator (1) (4) | Guidance / definitions (2) (3) | Year X-2 |
|----|--|--|---|---|-------------|
| 1 | TRANSFOR- MATION BO | Specific CO ₂ emissions of public and auto-pro- ducer power | CO ₂ emissions from public and auto-pro- ducer thermal power stations, kt | CO ₂ emissions from all fossil fuel combustion for gross electricity and heat production by public and auto-producer thermal power and combinedheat and power plants. Emissions from heat only plants are not included. | |
| | | plants, t/TJ | All products – output by public and au- to-producer thermal power stations, PJ | Gross electricity produced and any heat sold to third parties (combined heat and power plants - CHP) by public and auto-producer thermal power and com- bined heat and power plants. Output from heat only plants is not included. Public thermal plants generate electricity (and heat) for sale to third parties, as their primary activity. They may be privately or publicly owned. Auto-producer thermal power stations generate electricity (and heat) wholly or partly for their use as an activity, which supports their primary activity. The gross electricity generation is measured at the outlet of the main transformers, i.e. the con- sumption of electricity in the plant auxiliaries and in transformers is included. (source: energy balance) | |
| 2 | TRANSFOR- MATION E0 | Specific CO ₂ emissions of auto-produc- er plants, t/TJ | CO ₂ emissions from auto-producers, kt | CO ₂ emissions from all fossil fuel combustion for gross electricity and heat production by auto-pro- ducer thermal power and combined heat and power plants. | |
| | | | | Gross electricity produced and any heat sold to third parties (combined heat and power - CHP) by au- to-producer thermal power and combined heat and power plants. Auto-producer thermal power stations generate electricity (and heat) wholly or partly for their use as an activity, which supports their primary activity. The gross electricity generation is measured at the outlet of the main transformers, i.e. the con- sumption of electricity in the plant auxiliaries and in transformers is included (source: energy balance). | |
| 3 | INDUSTRY A1.1 | Total CO ₂ in- tensity - iron and steel industry, t/ | Energy-related CO ₂ emissions chemical industries, kt | CO ₂ emissions from combustion of fossil fuels in manufacture of chemicals and chemical products including combustion for the generation of electrici- ty and heat (IPCC source category 1A2c). | |
| | | million euro | gross value added - chemical industry, bil- lion Euro | Gross value added at constant 2016 prices in man- ufacture of chemicals and chemical products (NACE 24) (source: National Accounts) | |

| No | Nomen- clature in Eurostat energy efficiency indicators | Indicator | Numerator / denominator (1) (4) | Guidance / definitions (2) (3) | Year X-2 |
|--|--|---|---|--|-------------|
| 4 | INDUSTRY A1.2 | Energy-re- lated CO ₂ intensity - chemical | Energy-related CO ₂ emissions chemical industries, kt | CO ₂ emissions from combustion of fossil fuels in manufacture of chemicals and chemical products including combustion for the generation of electricity and heat (IPCC source category 1A2c). | |
| | | industry, t/ million euro | gross value added - chemical industry, bil- lion Euro | Gross value added at constant 2016 prices in man- ufacture of chemicals and chemical products (NACE 24) (source: National Accounts) | |
| 5 | INDUSTRY A1.3 | Energy-re- lated CO ₂ intensity - glass, pottery | Energy-related CO ₂ emissions glass, pottery and building materials, kt | CO ₂ emissions from combustion of fossil fuels in manufacture of non-metallic mineral products (NACE 26) including combustion for the generation of electricity and heat. | |
| | | and building materials industry, t/ million euro | gross value added - glass, pottery and buildings material industry, billion Euro | Gross value added at constant 2016 prices in manu- facture of non-metallic mineral products (NACE 26) (source: National Accounts) | |
| 6 | INDUSTRY A1.4 | Energy-re- lated CO ₂ intensity - food, drink and tobacco | Energy-related CO ₂ emissions from food, drink and tobacco industry, kt | CO ₂ emissions from combustion of fossil fuels in manufacture of food products and beverages and tobacco products including combustion for the generation of electricity and heat (IPCC source category 1A2e). | |
| | | million euro | gross value-added - food, drink and tobacco industry, bil- lion Euro | Gross value added at constant 2016 prices in man- ufacture of food products and beverages (NACE 15) and tobacco products (NACE 16) (source: National Accounts) | |
| 7 INDUSTRY A1.5 | | Energy-re- lated CO ₂ in- tensity paper and printing industry, t/million euro | Energy-related CO ₂ emissions paper and printing, kt | CO ₂ emissions from combustion of fossil fuels in manufacture of pulp, paper and paper products and publishing, printing and reproduction of recorded media including emissions from combustion for the generation of electricity and heat (IPCC source category 1A2d) | |
| | | | Gross value-added - paper and printing industry, billion Euro | Gross value added at constant 2016 prices in manu- facture of pulp, paper and paper products (NACE 21) and publishing, printing and reproduction of record- ed media (NACE 22) (source: National Accounts) | |
| 8 HOUSE- HOLDS A0 Emissions of households heating | | CO ₂ emissions of households for space heating, kt | $\rm CO_2$ emissions from fossil fuel combustion for space heating in households. | | |
| | | for space heating, kg/m ² | surface area of per- manently occupied dwellings, million m ² | Total surface area of permanently occupied dwell- ings | |
| 9 | SERVICES BO | Specific CO ₂ emissions of commercial and institu- | CO ₂ emissions from space heating in commercial and institutional, kt | CO ₂ emissions from fossil fuel combustion for space heating in commercial and institutional buildings in the public and private sectors. | |
| | | tional sector for space heating, kg/m ² | Surface area of ser- vices buildings, mil- lion m ² | Total surface area of services buildings (NACE 41, 50, 51, 52, 55, 63, 64, 65, 66, 67, 70, 71, 72, 73, 74, 75, 80, 85, 90, 91, 92, 93, 99) | |

| No | Nomen- clature in Eurostat energy efficiency indicators | Indicator | Numerator / denominator (1) (4) | Guidance / definitions (2) (3) | Year X-2 |
|----|--|--|---|---|-------------|
| 10 | TRANSPORT B0 | Specific diesel related CO ₂ | CO ₂ emissions of diesel-driven passen- ger cars, kt | CO ₂ emissions from the combustion of diesel for all transport activity with passenger cars (IPCC source category 1A3bi only diesel) | |
| | | passenger cars, g/km | Number of kilome- tres of diesel-driven passenger cars, bil- lion km | Number of vehicle kilometres of total diesel-driven passenger cars licensed to use roads open to public traffic. (source: transport statistics) | |
| 11 | TRANSPORT B0 | RANSPORT Specific 0 petrol re- lated CO ₂ | CO ₂ emissions of petrol-driven passen- ger cars, kt | CO ₂ emissions from the combustion of petrol for all transport activity with passenger cars (IPCC source category 1A3bi only petrol) | |
| | | emissions of passanger cars, g/km | Number of kilome- tres of petrol-driven passenger cars, bil- lion km | Number of vehicle kilometres of total petrol-driven passenger cars licensed to use roads open to public traffic. (source: transport statistics) | |

Notation: x = reporting year

Notes:

(1) Contracting Parties shall report numerator and denominator, if not included in the CRT.

(2) **Contracting Parties** shall follow this guidance. If they cannot follow exactly this guidance or if numerator and denominator are not entirely consistent, **Contracting Parties** shall clearly indicate this.

(3) The references to IPCC source categories refer to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories.

(4) One billion means one thousand millions.

ANNEX XII

Reporting on consistency of reported emissions with data from the EU Emissions Trading System pursuant to Article 14

Allocation of verified emissions reported by installations and operators under Directive 2003/87/EC to source categories of the national greenhouse gas inventory Contracting Party

Reporting year:

Basis for data: verified ETS emissions and greenhouse gas emissions as reported in inventory submission for the year X-2

| | | Total emissi | ons (CO ₂ -eq) | |
|--|---|---|--|-------------|
| | Greenhouse gas inventory emissions [kt CO ₂ eq] (3) | Verified emissions under Direc- tive 2003/87/ EC [kt CO ₂ eq] (3) | Ratio in % (Verified emissions/ inventory emissions) (3) | Comment (2) |
| Greenhouse gas emissions (for GHG inventory: total GHG emissions, including indirect CO_2 emissions if reported, without LULUCF, and excluding emissions from domestic aviation; for Directive 2003/87/EC: GHG emissions from stationary installations under Article 2(1) of Directive 2003/87/EC) | | | | |
| CO_2 emissions (for GHG inventory: total CO_2 emissions, including indirect CO2 emissions if reported, without LULUCF,, and excluding CO ₂ emissions from domestic aviation; for Directive 2003/87/EC: CO ₂ emissions from stationary installations under Article 2(1) of Directive 2003/87/EC) | | | | |

| | | CO ₂ em | issions | |
|---|--|--|--|-------------|
| Category (1) | Greenhouse gas inventory emissions [kt] (3) | Verified emis- sions under Directive 2003/87/EC [kt] (3) | Ratio in % (Verified emissions/ inventory emissions) (3) | Comment (2) |
| 1.A Fuel combustion activities, total | | | | |
| 1.A Fuel combustion activities, stationary 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 | | | | |

| Iron and steel (for GHG inventory combined CRT cat- egories 1.A.2, at 2.C.1 + 1.A.1.c and other relevant CRT categories that include emissions from iron and steel (e.g. 1A1a, 1B1) (a)) 1.A.2. Manufacturing industries and construction 1 1.A.2. Iron and steel 1 1.A.2. Manufacturing industries and construction 1 1.A.2. A lon - ferrous metals 1 1.A.2. Chemicals 1 1.A.2. C Apulo, paper and print 1 1.A.2. Q pulo, paper and print 1 1.A.2. Q fuer 1 1.A.3. Q other 1 1.A.3. Q other 1 1.A.3. Q other 1 1.A.3. Q other 1 1.A.3. Q other transportation (pipeline transport) 1 1.A.4. Commercial/Institutional 1 1.A.4. Commercial/Institutional 1 1.A.4. Comport and storage 1 1.C CO, Transport and storage 1 1.C.2. Dijection and storage 1 1.C.3. Other 1 2.A.4 Uther production 1 2.A.1 Cement production 1 2.A.2 Uther production 1 2.A.3 Giass production 1 2.A.3 Giass | |
|--|---|
| 1.A.2. Manufacturing industries and construction | Iron and steel (for GHG inventory combined CRT cat- egories 1.A.2.a + 2.C.1 + 1.A.1.c and other relevant CRT categories that include emissions from iron and steel (e.g. 1A1a, 1B1) (4)) |
| 1.A.2.a Iron and steel | 1.A.2. Manufacturing industries and construction |
| 1.A.2.b Non-ferrous metals 1 1.A.2.c Chemicals 1 1.A.2.d Pulp, paper and print 1 1.A.2.e Food processing, beverages and tobacco 1 1.A.2.f Non-metallic minerals 1 1.A.2.g Other 1 1.A.3.r Transport 1 1.A.3.r Other transportation (pipeline transport) 1 1.A.4 Other sectors 1 1.A.4 Other sectors 1 1.A.4.a Commercial/Institutional 1 1.C.1 Transport and storage 1 1.C.2 Injection and storage 1 1.C.2 Injection and storage 1 < | 1.A.2.a Iron and steel |
| 1.A.2.c Chemicals 1 1.A.2.d Pulp, paper and print 1 1.A.2.e Food processing, beverages and tobacco 1 1.A.2.e Food processing, beverages and tobacco 1 1.A.2.f Non-metallic minerals 1 1.A.3. Transport 1 1.A.3. Transport 1 1.A.3. Coher transportation (pipeline transport) 1 1.A.4. Other sectors 1 1.A.4. Commercial/Institutional 1 1.A.4. Cagriculture/Forestry/Fisheries 1 1.B Fugitive emissions from Fuels 1 1.C. Ognapport and storage 1 1.C.2 Injection and storage 1 1.C.3 Other 1 2.A Mineral products 1 2.A.1 Cement production 1 2.A.2 Lime production 1 2.A.3 Glass production 1 2.A.4 Other process uses of carbonates 1 2.B.1 Ammonia production 1 2.B.1 Ammonia glyoxal and glyoxylic acid production 1 2.B.5 Carbide production 1 2.B.6 Titanium dioxide production 1 2.B.7 Soda ash production 1 2 | 1.A.2.b Non-ferrous metals |
| 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 1.A.3. Transport 1.A.3. Transport 1.A.3. eOther transportation (pipeline transport) 1.A.4.a Commercial/Institutional 1.C.2 Injection and storage 1.C.1 Transport of CO2 1.C.2 Injection and storage 1.C.3 Other 2.A Mineral products 2.A Line production 2.A.2 Line production 2.A.3 Glass production 2.A.4 Other process uses of carbonates 2.8 Chemical industry | 1.A.2.c Chemicals |
| 1.A.2.e Food processing, beverages and tobacco 1.A.2.f Non-metallic minerals 1.A.2.g Other 1.A.3. Transport 1.A.3. Transport 1.A.3. Transport 1.A.3. Transport 1.A.3. Transport 1.A.3. Other transportation (pipeline transport) 1.A.4 other sectors 1.A.4.a Commercial/Institutional 1.A.5.a Commercial/Institutional 1.C.1 Transport and storage 1.C.2 Injection and storage 1.C.3 Other 2.A Mineral products 2.A Mineral products 2.A I Cement production 2.A.2 Line production 2.A.3 Glass production 2.B.4 Ceprolactam, gloxal and gloxylic acid production 2.B.5 Carbide produ | 1.A.2.d Pulp, paper and print |
| 1.A.2.f Non-metallic minerals Image: Second Sec | 1.A.2.e Food processing, beverages and tobacco |
| 1.A.2.g Other 1.A.3. Transport 1.A.3. eV other transportation (pipeline transport) 1.A.4. Other sectors 1.A.4. Other sectors 1.A.4. Other sectors 1.A.4. Commercial/Institutional 1.A.4. Cagriculture/Forestry/Fisheries 1.B Fugitive emissions from Fuels 1.C. Cog Transport and storage 1.C. Transport of COg 1.C. Transport of COg 1.C. I Transport of COg 1.C. Z Injection and storage 1.C.3 Other 2.A Mineral products 2.A.1 Cement production 2.A.2 Lime production 2.A.3 Glass production 2.A.4 Other process uses of carbonates 2.B Chemical industry 2.B.1 Ammonia production 2.B.3 Adipic acid production 2.B.4 Caprolactam, glyoxal and glyoxylic acid pro- duction 2.B.5 Carbide production 2.B.7 Soda ash production 2.B.7 Soda ash production 2.B.8 Petrochemical and carbon black production 2.C.1 Iron and steel production 2.C.2 Ferroalloys production 2.C.2 Ferroalloys production | 1.A.2.f Non-metallic minerals |
| 1.A.3. Transport 1.A.3. e Other transportation (pipeline transport) 1.A.4 Other sectors 1.A.4.a Commercial/Institutional 1.C.1 Transport and storage 1.C.2 Injection and storage 1.C.3 Other 2.A.4 Internal production 2.A.3 Glass production 2.A.4 Other process uses of carbonates 2.B.6 Themical industry 2.B.1 Ammonia production 2.B.3 Adipic acid production (CO ₂) 2.B.4 Caprolactam, glyoxal and glyoxylic acid pro- duction 2.B.5 Carbide production 2.B.7 Soda ash production | 1.A.2.g Other |
| 1.A.3.e Other transportation (pipeline transport) 1.A.4 1.A.4 Other sectors 1.A.4.a Commercial/Institutional 1.A.4.c Agriculture/Forestry/Fisheries 1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1. | 1.A.3. Transport |
| 1.A.4 Other sectors | 1.A.3.e Other transportation (pipeline transport) |
| 1.A.4.a Commercial/Institutional | 1.A.4 Other sectors |
| 1.A.4.c Agriculture/Forestry/Fisheries Image: Constraint of the second seco | 1.A.4.a Commercial/Institutional |
| 1.B Fugitive emissions from Fuels Image: Color of Color | 1.A.4.c Agriculture/Forestry/Fisheries |
| 1.C CO2 Transport and storage Image: Constraint of CO2 1.C.1 Transport of CO2 Image: Constraint of CO2 1.C.2 Injection and storage Image: Constraint of CO2 1.C.3 Other Image: Constraint of CO2 2.A Mineral products Image: Constraint of CO2 2.A.1 Cement production Image: Constraint of CO2 2.A.1 Cement production Image: Constraint of CO2 2.A.2 Lime production Image: Constraint of CO2 2.A.3 Glass production Image: Constraint of CO2 2.A.4 Other process uses of carbonates Image: Constraint of CO2 2.B.1 Ammonia production Image: Constraint of CO2 2.B.3 Adipic acid production (CO2) Image: Constraint of CO2 2.B.4 Caprolactam, glyoxal and glyoxylic acid production Image: Constraint of Co2 2.B.5 Carbide production Image: Constraint of Co2 2.B.6 Titanium dioxide production Image: Constraint of Co2 2.B.7 Soda ash production Image: Constraint of Co2 2.C.1 Iron and steel production Image: Constraint of Co2 2.C.2 Ferroalloys production Image: Constraint of Co2 | 1.B Fugitive emissions from Fuels |
| 1.C.1 Transport of CO2 Image: Constraint of CO2 1.C.2 Injection and storage Image: Constraint of CO2 1.C.3 Other Image: Constraint of CO2 2.A Mineral products Image: Constraint of CO2 2.A Mineral products Image: Constraint of CO2 2.A.1 Cement production Image: Constraint of CO2 2.A.1 Cement production Image: Constraint of CO2 2.A.2 Lime production Image: Constraint of CO2 2.A.3 Glass production Image: Constraint of CO2 2.A.4 Other process uses of carbonates Image: Constraint of CO2 2.B.1 Ammonia production Image: Constraint of CO2 2.B.3 Adipic acid production (CO2) Image: Constraint of CO2 2.B.4 Caprolactam, glyoxal and glyoxylic acid production Image: Constraint of CO2 2.B.5 Carbide production Image: Constraint of Constrai | 1.C CO ₂ Transport and storage |
| 1.C.2 Injection and storage | 1.C.1 Transport of CO ₂ |
| 1.C.3 Other Image: Constraint of the second sec | 1.C.2 Injection and storage |
| 2.A Mineral products | 1.C.3 Other |
| 2.A.1 Cement production | 2.A Mineral products |
| 2.A.2 Lime production | 2.A.1 Cement production |
| 2.A.3 Glass production | 2.A.2 Lime production |
| 2.A.4 Other process uses of carbonates | 2.A.3 Glass production |
| 2.B Chemical industry | 2.A.4 Other process uses of carbonates |
| 2.B.1 Ammonia production | 2.B Chemical industry |
| 2.B.3 Adipic acid production (CO2) | 2.B.1 Ammonia production |
| 2.B.4 Caprolactam, glyoxal and glyoxylic acid pro- duction | 2.B.3 Adipic acid production (CO ₂) |
| 2.B.5 Carbide production | 2.B.4 Caprolactam, glyoxal and glyoxylic acid pro- duction |
| 2.B.6 Titanium dioxide production 2.B.7 Soda ash production 2.B.8 Petrochemical and carbon black production 2.C. Metal production 2.C.1 Iron and steel production 2.C.2 Ferroalloys production | 2.B.5 Carbide production |
| 2.B.7 Soda ash production | 2.B.6 Titanium dioxide production |
| 2.B.8 Petrochemical and carbon black production | 2.B.7 Soda ash production |
| 2.C Metal production | 2.B.8 Petrochemical and carbon black production |
| 2.C.1 Iron and steel production | 2.C Metal production |
| 2.C.2 Ferroalloys production | 2.C.1 Iron and steel production |
| | 2.C.2 Ferroalloys production |
| 2.C.3 Aluminium 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 metal production | | |

| | N2O emissions | | | | | |
|---|---|---|--|-------------|--|--|
| Category (1) | Greenhouse gas inventory emissions [kt CO ₂ eq] (3) | Verified emis- sions under Directive 2003/87/EC [kt CO ₂ eq] (3) | Ratio in % (Verified emissions/ inventory emissions) (3) | Comment (2) | | |
| 2.B.2 Nitric acid production | | | | | | |
| 2.B.3 Adipic acid production | | | | | | |
| 2.B.4 Caprolactam, glyoxal and glyoxylic acid pro- duction | | | | | | |

| | | PFC | emissions | |
|----------------------------|---|---|--|-------------|
| Category (1) | Greenhouse gas inventory emissions [kt CO ₂ eq] (3) | Verified emis- sions under Directive 2003/87/EC [kt CO ₂ eq] (3) | Ratio in % (Verified emissions/ inventory emissions) (3) | Comment (2) |
| 2.C.3 Aluminium production | | | | |

Notation: x = reporting year

Notes:

(1) The allocation of verified emissions to disaggregated inventory categories at four digit level must be reported where such allocation of verified emissions is possible and emissions occur. The following notation keys should be used:

NO = not occurring; IE = included elsewhere; C = confidential;

Negligible = small amount of verified emissions may occur in respective CRT category, but amount is < 5 % of the category.

(2) The column comment should be used to give a brief summary of the checks performed and if a **Contracting Party** wants to provide additional explanations with regard to the allocation reported.

(3) Data to be reported up to one decimal point for kt and % values.

(4) To be filled on the basis of combined CRT categories pertaining to 'Iron and Steel', to be determined individually by each **Contracting Party**; the stated formula is for illustration purposes only.

ANNEX XIII

ANNEX XIV

Reporting on consistency with energy statistics pursuant to Article 17(2)

| | FUEL T | YPES | Apparent con- sumption reported in GHG inventory (TJ) (3) | Apparent consump- tion using data reported pursuant to Regulation (EC) No 1099/2008 (TJ) (3) | Absolute difference (1) (TJ) (3) | Relative difference (2) % (3) | Explana- tions for differences |
|---------|---------------|---|---|---|--|-------------------------------------|--------------------------------------|
| Liquid | Primary | Crude oil | | | | | |
| tossil | fuels | Orimulsion | | | | | |
| | | Natural gas liquids | | | | | |
| | Second- | Gasoline | | | | | |
| | ary fuels | Jet kerosene | | | | | |
| | | Other kerosene | | | | | |
| | | Shale oil | | | | | |
| | | Gas/diesel oil | | | | | |
| | | Residual fuel oil | | | | | |
| | | Liquefied pe- troleum gases (LPG) | | | | | |
| | | Ethane | | | | | |
| | | Naphtha | | | | | |
| | | Bitumen | | | | | |
| | | Lubricants | | | | | |
| | | Petroleum coke | | | | | |
| | | Refinery feed- stocks | | | | | |
| | | Other oil | | | | | |
| Other I | iquid fossil | | | | | | |
| Liquid | fossil totals | | | | | | |

| | FUEL T | YPES | Apparent con- sumption reported in GHG inventory (TJ) (3) | Apparent consump- tion using data reported pursuant to Regulation (EC) No 1099/2008 (TJ) (3) | Absolute difference (1) (TJ) (3) | Relative difference (2) % (3) | Explana- tions for differences |
|------------------|----------------------|----------------------------|---|---|--|-------------------------------------|--------------------------------------|
| | Primary | Anthracite | | | | | |
| | fuels | Coking coal | | | | | |
| | | Other bitumi- nous coal | | | | | |
| | | Sub-bituminous coal | | | | | |
| | | Lignite | | | | | |
| | | Oil shale and tar sand | | | | | |
| | Second- ary fuels | BKB and patent fuel | | | | | |
| | | Coke oven/gas coke | | | | | |
| | | Coal tar | | | | | |
| Other s | solid fossil | | | | | | |
| Solid fo | ossil totals | | | | | | |
| Gaseou | us fossil | Natural gas (dry) | | | | | |
| Other of fossil | gaseous | | | | | | |
| Gaseou totals | us fossil | | | | | | |
| Waste | (non-biomas | s fraction) | | | | | |
| Other f | fossil fuels | | | | | | |
| Peat | | | | | | | |
| Total | | | | | | | |

Notes:

(1) Apparent consumption reported in GHG inventory minus apparent consumption using data reported pursuant to Regulation (EC) No 1099/2008

(2) Absolute difference divided by apparent consumption reported in GHG inventory

(3) Data to be reported up to one decimal point for TJ and % values

ANNEX XV

ANNEX XVI

ANNEX XVII

ANNEX XVIII

ANNEX XX

ANNEX XXI

Timescales for cooperation and coordination in preparing the Energy Community greenhouse gas inventory report pursuant to Article 25(1)

| Ele | ement | Who | When | What |
|-----|--|---|---|---|
| 1. | Submission of annual inventories (complete CRT and elements of the national inventory report) by Member States | Contracting Parties | Annually by 15 January | Elements listed in Article 26(3) of Regulation (EU) 2018/1999 |
| 2. | 'Initial checks' of Contracting Party submissions | Secretariat (Eurostat), DG JRC), assisted by European Envi- ronment Agency (EEA) | For the Con- tracting Party submission from 15 January at the latest until 28 February | Checks to verify the transparency, accuracy, consisten- cy, completeness and comparability of Contracting Parties ' inventories (by EEA). Comparison of energy data provided by Contracting Parties in the CRT with Eurostat energy data (sectoral and reference approach) by Eurostat and EEA. Check of Con- tracting Parties ' agriculture inventories by JRC (in consultation with Contracting Parties). Check of Contracting Parties ' land use, land-use change and forestry (LULUCF) inventories by EEA (in consultation with JRC and Contracting Parties The findings of the initial checks will be documented. |
| 3. | Compilation of draft Energy Community inventory and inven- tory report (elements of the Energy Com- munity inventory report) | Secretariat (JRC), assisted by EEA | Until 28 February | Draft Energy Community inventory and inventory report (compilation of Contracting Party informa- tion), based on Contracting Party inventories and additional information where needed (as submitted on 15 January). |
| 4. | Circulation of 'ini- tial check' findings including notification of potential gap-filling | Secretariat assisted by EEA | 28 February | Circulation of 'initial check' findings including notifica- tion of potential gap-filling and making available the findings. |
| 5. | Circulation of draft Energy Community inventory and inven- tory report | Secretariat assisted by EEA | 28 February | Circulation of the draft Energy Community inventory on 28 February to Contracting Parties . Contracting Parties check data. |
| 6. | Submission of up- dated or additional inventory data and complete national inventory reports by Contracting Parties | Contracting Parties | By 15 March | Updated or additional inventory data submitted by Contracting Parties (to remove inconsistencies or to fill gaps) and complete national inventory reports. |
| 7. | Contracting Party commenting on the draft Energy Com- munity inventory | Contracting Parties | By 15 March | If necessary, provide corrected data and comments to the draft Energy Community inventory. |
| 8. | Contracting Party responses to the 'initial checks' Con- tracting Parties | Contracting Parties | By 15 March | Contracting Parties respond to 'initial checks' if applicable. |

| Element | Who | When | What |
|---|--------------------------------|---|--|
| 9. Circulation of fol- low-up initial check findings | Secretariat assisted by EEA | 15 March – 31 March | Evaluation of Contracting Parties ' responses to the initial-check findings and follow-up questions to Contracting Parties . |
| 10. Estimates for data missing from a na- tional inventory | Secretariat assisted by EEA | 31 March | The Secretariat prepares estimates for missing data by 31 March of the reporting year and communicates these to the Contracting Parties . |
| 11. Comments from Contracting Parties regarding the Com- mission estimates for missing data | Contracting Parties | 7 April | Contracting Parties provide comments on the Sec- retariat estimates for missing data, for consideration by the Secretariat. |
| 12. Contracting Parties responses to fol- low-up 'initial checks' | Contracting Parties | 7 April | Contracting Parties provide responses to follow up of 'initial checks'. |
| 13. Contracting Par- ties' submissions to the UNFCCC | Contracting Parties | 15 April | Submissions to the UNFCCC (with a copy to EEA). |
| 14. Final annual Energy Community inven- tory (incl. Energy Community invento- ry report) | Secretariat assisted by EEA | 15 April | Submission to UNFCCC of the final annual Energy Community inventory. |
| 15. Submission of any other resubmission after the initial check phase | Contracting Parties | When additional resubmissions occur | Contracting Parties provide to the Secretariat any other resubmission (CRT or national inventory report) which they provide to the UNFCCC secretariat after the initial check phase. |

ANNEX XXII

ANNEX XXIII

Format for reporting on national systems for policies and measures and projections pursuant to Article 36

The first report submitted pursuant to Article 36 shall provide a full description and contain all of the information listed in the Table below. For subsequent reporting years, only modifications of the national system for policies and measures and projections need to be reported.

| Reporting obligation | Fields for textual informa- tion | Examples of details that could be reported under this spe- cific reporting obligation |
|--|---|---|
| Name and contact information for the entities with overall responsibility for the National Systems for policies and | | List the responsible entity or entities, and their specific roles and responsibilities. Identify the lead entity. |
| measures and projections | | If such a description has already been provided, report changes to the name and contact information. |
| Institutional arrangements in place for preparation of reports on policies and measures and of projections as well as for reporting on them, including an | | Define the overall structure/set-up of your national system. List all organisations involved in the preparation of the report on policies and measures and projections and in the archiving of informa- tion, their responsibilities, and their interactions. |
| organogram | | Provide a description of the organogram to show the organisa- tional structure of the National System for policies and measures and projections, including the functional and hierarchical interre- lationships between organisations. |
| | | If such a description of the national system has already been pro- vided, report and explain changes to institutional arrangements. |
| Legal arrangements in place for prepa- ration of reports on policies and mea- sures and of projections | | Are there any legal arrangements in place to ensure reporting is completed, and/or data provided? Report the legislation and its scope. |
| | | If such a description has already been provided, report the changes to legal arrangements in place for the preparation of the report on policies and measures and projections. |
| Procedural and administrative arrange- ments and timescales in place for | | Report the cycle for preparation of report on policies and mea- sures and of projections. |
| the preparation of reports on policies and measures and of projections, to ensure the timeliness, transparency, accuracy, consistency, comparability | | Summarise the methodologies and mechanisms how timeliness, transparency, accuracy, consistency, comparability and complete- ness of the information reported are ensured. |
| and completeness of the information reported. | | Report on assurance of consistency with preparation of reports on policies and measures, where relevant, and of projections under Directive (EU)2016/2284. |
| | | Optionally, provide diagrams that show the processes involved in the national system. These diagrams could include the informa- tion flows through the system, and at which points QC and QA measures are applied. |
| | | If such a description has already been provided, report the changes to procedural and administrative arrangements. |

| Description of the information collec- tion process | Provide a summary of the process for collecting information for developing policies and measures, evaluating policies and mea- sures and for developing projections. Explain if and how consis- tent processes are used for collecting and using information for policies and measures and projections. |
|---|---|
| | If such a description has already been provided, report the changes to the data collection process. |
| Description of the alignment with the national inventory system | Provide information on the alignment with the national system for the GHG inventory, such as processes to ensure consistency of the data used. |
| | Option to provide details of links to other climate reporting systems if relevant. |
| | If such a description has already been provided, report changes to the links to the national system for greenhouse gas invento- ries. |
| Description of the links to arrange- ments on integrated national energy and climate-reports pursuant to Art. 17 of Regulation (EU) 2018/1999 | Provide a summary of the linkages between the processes used to collect data related to policies and measures and projections, and relevant processes to report on progress other dimensions of the Energy Union, e.g. processes to foster consistent use of energy-related data for the development of policies and mea- sures and projections and |
| | for integrated progress reporting. |
| | If such a description has already been provided, report changes to the links to energy-related reporting systems. |
| Description of the quality assurance and quality control activities for re- porting of policies and measures and projections | Provide a summary of the Quality Control activities applied to help ensure accuracy and completeness in the policies and measures and projections reports. Report the Quality Assurance activities in place. |
| | If such a description has already been provided, report the changes to the quality control and quality assurance activities. |
| Description of the process for selecting assumptions, methodologies and mod- els for making projections of anthropo- genic greenhouse gas emissions | Describe the process behind the selection of methodologies and models used. Contracting Parties may also report the reasons for their choices, or cross reference to other reports providing this information. |
| | If such a description has already been provided, report the changes to these processes. |
| Description of procedures for the official consideration and approval | Describe the process for officially approving the national system or changes to the national system. |
| of the Contracting Parties national system for policies and measures and projections | If such a description has already been provided, report the changes to this process. |
| Information on relevant institutional administrative and procedural arrange- ments for domestic implementation of the EU's nationally determined contribution, or changes to such arrangements | Refer to the arrangements for implementing policies and mea- sures as means of domestic implementation and to the arrange- ments for national projections of anthropogenic greenhouse gas emissions by sources and removals by sinks as means to track domestic progress. |
| | is such a description has already been provided, report the changes to such arrangements. |
| Description of the stakeholder engage- ment undertaken in relation to the preparation of policies and measures and projections | Report a description of the stakeholder engagement undertak- en in relation to the preparation of policies and measures and projections. Indicate which stakeholders were consulted, and any changes or improvements made. |

ANNEX XXIV

Reporting on national policies and measures pursuant to Article 37 Table 1: Sectors, gases and type of policy instrument

| | General comments | |
|---------------------------------------|---|--|
| | Reference to assessments and underpinning technical reports | |
| Indicators used to monitor and | Value | |
| evaluate progress over time () | Year | |
| | Description | |
| Entities responsible for implement- | Name | |
| ing the policy (i) | Туре | |
| | Projections scenario in which the PaM is included | |
| Implementation period | Finish | |
| | | |
| | Status of implementation (h) | |
| Union policies which resulted in the | Other | |
| implementationorthe raim | Energy Community policy (g) | |
| | Type of policy Instrument (f) | |
| Assessment of the contribution of the | policy or Measure to the achievement of the long-term strategy re- ferred to in Article 15 Regulation (EU) 2018/1999 | |
| | Short description | |
| | Quantified objective (e) | |
| | Objective (d) | |
| | GHG(s) affected (c) | |
| | Sector(s) affected (b) | |
| | Geographical coverage (a) | |
| In case of a groupe | ed policy or measure, which single policies or measures does it cover | |
| | Single or grouped policy or measure | |
| | Name of policy or measure | |
| | PaM number | |

Notes: Abbreviations: GHG = greenhouse gas; LULUCF = land use, land-use change and forestry.

(a) Contracting Parties shall select from the following categories: covering two or more countries, national, regional, local.

(b) **Contracting Parties** shall select from the following sectors (more than one sector can be selected for cross-sectoral policies and measures): energy supply (comprising extraction, transmission, distribution and storage of fuels as well as the transformation of energy for heating and cooling and electricity production); energy consumption (comprising consumption of fuels and electricity by end users such as households, public administration; services, industry and agriculture); transport; industrial processes (comprising industrial activities that chemically or physically transform materials leading to greenhouse gas emissions, use of greenhouse gases in products and non-energy uses of fossil fuel carbon); agriculture; LULUCF; waste management/waste; other sectors.

(c) **Contracting Parties** shall select from the following GHGs (more than one GHG can be selected): carbon dioxide (CO₂); methane (CH₄); nitrous oxide (N₂O); hydrofluorocarbons (HFC); perfluorocarbons (PFC); sulphur hexafluoride (SF6); nitrogen trifluoride (NF₃).

(d) Objective means 'initial statement of the outcomes (including results and impacts) intended to be achieved by the intervention'. **Contracting Parties** shall select from the following objectives (more than one objective may be selected, additional objectives may be added and specified under 'other'):

For **energy supply** — increase in renewable energy sources in the electricity sector; increase in renewable energy in the heating and cooling sector; switch to less carbon-intensive fuels; enhanced non-renewable low carbon generation (nuclear); reduction of losses; efficiency improvement in the energy and transformation sector; carbon capture and storage or carbon capture and utilisation; control of fugitive emissions from energy production; other energy supply.

For **energy consumption** — efficiency improvements of buildings; efficiency improvement of appliances; efficiency improvement in services/tertiary sector; efficiency improvement in industrial end-use sectors; demand management/reduction; other energy consumption.

For **transport** — efficiency improvements of vehicles; modal shift to public transport or non-motorized transport; low carbon fuels; electric road transport; demand management/reduction; improved behaviour; improved transport infrastructure; reduce emissions from international air or maritime transport; other transport.

For **industrial processes** — installation of abatement technologies; improved control of fugitive emissions from industrial processes; improved control of manufacturing, fugitive and disposal emissions of fluorinated gases; replacement of fluorinated gases by gases with a lower GWP value; other industrial processes.

For **waste management/waste** – demand management/reduction; enhanced recycling; enhanced CH4 collection and use; improved treatment technologies; improved landfill management; waste incineration with energy use; improved wastewater management systems; reduced landfilling; other waste.

For **agriculture** — reduction of fertilizer/manure use on cropland; other activities improving cropland management; improved livestock management; improved animal waste management systems; activities improving grazing land or grassland management; improved management of organic soils; other agriculture.

For **LULUCF** — afforestation and reforestation; conservation of carbon in existing forests; enhancing production in existing forests; increasing the harvested wood products pool; enhanced forest management; prevention of deforestation; strengthening protection against natural disturbances; substitution of GHG intensive feedstocks and materials with harvested wood products; prevention of drainage or rewetting of wetlands; restoration of degraded lands; other LULUCF.

For Other — Contracting Parties shall provide a brief description of the objective.

(e) **Contracting Parties** shall include, as a minimum, the figure(s), unit(s), end year and base year if the objective(s) is(are) quantified. Quantified objectives shall be specific, measurable, achievable, relevant and time-related.

(f) **Contracting Parties** shall select from the following policy types: economic; fiscal; voluntary/negotiated agreements; regulatory; information; education; research; planning; other.

(g) List here only Union policy/policies that are implemented through the national policy or where national policies are aimed directly at meeting the objectives of Union policies. **Contracting Party** shall select a policy/policiesfrom a list provided in the electronic version of the tabular format, or select other and specify the name of the **Energy Community** policy. **Contracting Parties** shall select Directive (EU) 2016/2284 if the PaM has been reported under that Directive.

(h) **Contracting Parties** shall select from the following categories: planned; adopted; implemented; expired. Expired policies and measures shall be reported in the template only if they have an effect, or if they are expected to continue to have an effect on greenhouse gas emissions.

(i) **Contracting Parties** shall select from the following options and enter the name/s of entities responsible for implementing the policy or measure (more than one entity may be selected): national government; regional entities; local government; companies/ businesses/industrial associations; research institutions; others not listed.

(j) **Contracting Parties** shall provide any indicator used (including the unit) and values for such indicators that they use to monitor and evaluate progress of policies and measures. Those values can be either *ex-post* or *ex-ante* values and Contracting Parties shall specify the year or years for which the value applies. Values for multiple indicators and years may be reported. Performance indicators identified by Contracting Parties shall be relevant, accepted, credible, easy and robust.

Table 2: Available results of ex-ante and ex-post assessments of the effects of individual or groups of policies and measures on mitigation of climate change (a)

| Ex-post | Documentation/ Source of estimation if available (provide a webl | ink of the report where the figure | | | | | | | | | | | |
|-----------------------|--|------------------------------------|--|--|--|--|--|--|--|--|--|--|--|
| | | Eactors affected by the PaM | | | | | | | | | | | |
| | Explanation of the basis for the mitigation est | | | | | | | | | | | | |
| | GHG emissions reduction (kt CO -equivalent per year) (b) | Total (d) | | | | | | | | | | | |
| | Gind emissions reduction (kt co ₂ equivalent per year) (b) | | | | | | | | | | | | |
| | | EDEVESR | | | | | | | | | | | |
| | | FLLETS | | | | | | | | | | | |
| | | Year of which reduction applies | | | | | | | | | | | |
| Ex-ante assessment | Documentation / Source of estimation if available (provide a web figure is referenced from) | ink of the report where the | | | | | | | | | | | |
| | | Factors affected by the PaM | | | | | | | | | | | |
| | Explanation of the basis for the mitigation estimates | | | | | | | | | | | | |
| | GHG emissions reductions in t + 15 (kt CO ₂ -equivalent per year) | Total (d) | | | | | | | | | | | |
| | | LULUCF (c) | | | | | | | | | | | |
| | | ESR | | | | | | | | | | | |
| | | EU ETS | | | | | | | | | | | |
| | GHG emissions reductions in t + 10 (kt CO_2 -equivalent per year) | Total (d) | | | | | | | | | | | |
| | | LULUCF (c) | | | | | | | | | | | |
| | | ESR | | | | | | | | | | | |
| | | EU ETS | | | | | | | | | | | |
| | GHG emissions reductions in t + 5 (kt CO_2 -equivalent per year) | Total (d) | | | | | | | | | | | |
| | | LULUCF (c) | | | | | | | | | | | |
| | | ESR | | | | | | | | | | | |
| | | EU ETS | | | | | | | | | | | |
| | GHG emissions reductions in year t (kt CO_2 -equivalent per year) | Total (d) | | | | | | | | | | | |
| | | LULUCF (c) | | | | | | | | | | | |
| | | ESR | | | | | | | | | | | |
| | EU ETS | | | | | | | | | | | | |
| | Policy impacting EU ETS, I | ULUCF and/or ESD/ESR /emission | | | | | | | | | | | |
| | | PaM number | | | | | | | | | | | |

Abbreviations: EU ETS = EU Emission Trading System; ESR = Effort Sharing Regulation (EU) 2018/842; ESD = Effort Sharing Decision No 406/2009/EC; LULUCF = land use, land-use change and forestry.

Notes:

(a) **Contractinf Parties** shall report on all the policies and measures or groups of policies and measures for which such assessment is available. Notation: t signifies the first future year ending with 0 or 5 immediately following the reporting year.

(b) **Contractinf Parties** may report ex-post assessments for more than one year, where available reporting shall focus on years ending with 0 or 5.

(c) Enhanced removals or decreased emissions of greenhouse gases shall be expressed as a positive number. Decreased removals or increased emissions shall be expressed as a negative number.

(d) In this field, the total of the EU ETS and ESR sectors shall be entered if the split between EU ETS and ESR is not available.

(e) Ex-post evaluations include all evaluations based on results from parts of, or the whole implementation period.

Table 3: Available projected and realised costs and benefits of individual or groups of policies and measures on mitigation of climate change (a)

| | Description of non-GHG mitigation benefits. | |
|---------------------|---|--|
| | Documentation / Source of cost estimation (provide a weblink of the report where the figure is referenced from) | |
| | Description of cost estimates (Basis for cost estimate, what type of costs are included in the estimate, methodology) (c) | |
| | Price year | |
| Realized costs and | Absolute net cost per year in EUR | |
| benefits | Net costs in EUR per tonne CO ₂ -equivalent reduced/ sequestered | |
| | Absolute benefit (b) per year in EUR | |
| | Benefits (b) in EUR per tonne CO ₂ -equivament reduced/ sequestered | |
| | Absolute gross costs per year in EUR | |
| | Gross costs in EUR per tonne CO ₂ -equivalet reduced/sequestered | |
| | Year(s) for which cost has been calculated | |
| | Description of non-GHG mitigation benefits | |
| | Documentation / Source of cost estimation (provide a weblink of the report where the figure is referenced from) | |
| | Description of cost estimates (basis for cost estimate, what type of costs are included in the estimate, methodology) (c) | |
| | Price year | |
| Projected costs and | Absolute net cost per year in EUR | |
| benefits | Net costs in EUR per tonne CO ₂ -equivalent reduced/ sequestered | |
| | Absolute benefit (b) per year in EUR | |
| | Benefits(b) in EUR per tonne CO ₂ -equivalent reduced/ sequestered | |
| | Absolute gross costs per year in EUR | |
| | Gross costs in EUR per tonne $\rm CO_2$ -equivalent reduced/sequestered | |
| | Year(s) for which cost has been calculated | |
| | PaM number | |
| | | |

Notes:

(a) **Contracting Parties** shall report on all the policies and measures or groups of policies and measures for which such assessment is available.

(b) A benefit shall be indicated in the template as a negative cost.

(c) The description shall include the type of costs and benefits that have been taken into consideration, the stakeholders considered in the assessment of costs and benefits, the baseline against which costs and benefits are compared, and the methodology.

ANNEX XXV

Reporting on national projections pursuant to Article 38

Table 1a: Greenhouse gas projections by gases and categories (1)

| Category (2) | Se CC SF HF spo HF (k | Separately for: CO_2 , CH_4 , N_2O , $SF_{e'}$, NF_3 , (kt) and HFCs, PFCs, un- specified mix of HFCs and PFCs- (kt CO_2 -eq) (3) | | | | | | Total GHG emis- sions (kt CO ₂ -eq) | | | | | | ETS emissions (kt CO ₂ -eq) (4) | | | | | | | | ESR emissions (kt CO2-eq) (5) | | | | | | | | |
|--|---|--|---|-------|--------|--------|-------------------------|---|-----|-------|--------|--------|------------|---|-------|---|-------|--------|--------|------------|-----------|----------------------------------|---|-------|--------|--------|--|--|--|--|
| | | Year | | | | | | | Yea | r | | | Year | | | | | | | Year | | | | | | | | | | |
| | projection base year (6) | t - 5 (7) | t | t + 5 | t + 10 | t + 15 | projection base year | t - 5 | t | t + 5 | t + 10 | t + 15 | projection | base year | c - 1 | t | t + 5 | t + 10 | t + 15 | projection | Dase year | t - 5 | t | t + 5 | t + 10 | t + 15 | | | | |
| Total excluding LULUCF | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total including LULUCF | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1. Energy | | | | | | | | | | | | | | | | | | | | | Τ | | | | | | | | | |
| A. Fuel combustion | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1. Energy industries | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| a. Public electricity and heat production | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| b. Petroleum refining | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| c. Manufacture of solid fuels and other energy industries | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2. Manufacturing industries and construction | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3. Transport | | | | | | | | | | | | | | | | | | | | | Τ | | | | | | | | | |
| a. Domestic aviation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| b. Road transportation | | | | | | | | | | | | | | | | | | | | | Τ | | | | | | | | | |
| c. Railways | | | | | | | | | | | | | | | | | | | | | Τ | | | | | | | | | |
| e. Other transportation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4. Other sectors | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| a. Commercial/ Institutional | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| b. Residential | | | | | | | | | | | | | | | | | | | | | Τ | | | | | | | | | |
| c. Agriculture/ Forestry/ Fishing | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5. Other | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B. Fugitive emissions from fuels | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1. Solid fuels | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| 2. Oil and natural gas and other emissions from energy production | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|---|
| C. CO ₂ transport and storage | | | | | | | | | | | | |
| 2. Industrial processes | | | | | | | | | | | | |
| A. Mineral Industry of which 2.A.1 (cement production) | | | | | | | | | | | | |
| B. Chemical industry | | | | | | | | | | | | 1 |
| C. Metal industry of which 2.C.1 (Iron and steel pro- duction) | | | | | | | | | | | | |
| D. Non-energy products from fuels and solvent use | | | | | | | | | | | | |
| E. Electronics industry | | | | | | | | | | | | 1 |
| F. Product uses as substitutes for ODS (8) | | | | | | | | | | | | |
| G. Other product manufac- ture and use | | | | | | | | | | | | |
| H. Other | | | | | | | | | | | | |
| 3. Agriculture | | | | | | | | | | | | |
| A. Enteric fermentation | | | | | | | | | | | | |
| B. Manure management | | | | | | | | | | | | |
| C. Rice cultivation | | | | | | | | | | | | |
| D. Agricultural soils | | | | | | | | | | | | |
| E. Prescribed burning of savannahs | | | | | | | | | | | | |
| F. Field burning of agricultural residues | | | | | | | | | | | | |
| G. Liming | | | | | | | | | | | | |
| H. Urea application | | | | | | | | | | | | |
| I. Other carbon-containing fertilizers | | | | | | | | | | | | |
| J. Other (please specify) | | | | | | | | | | | | 1 |
| 4. Land Use, Land-Use Change and Forestry (LULUCF, reported emis- sions and removals) (9) | | | | | | | | | | | | |
| A. Forest land | | | | | | | | | | | | |
| B. Cropland | | | | | | | | | | | | _ |
| C. Grassland | | | | | | | | | | | | |
| D. Wetlands | | | | | | | | | | | | |
| E. Settlements | | | | | | | | | | | | |
| F. Other Land | | | | | | | | | | | | |
| G. Harvested wood products | | | | | | | | | | | | |
| H. Other | | | | | | | | | | | | |

| 5. Waste | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|
| A. Solid Waste Disposal | | | | | | | | | | | | |
| B. Biological treatment of solid waste | | | | | | | | | | | | |
| C. Incineration and open burning of waste | | | | | | | | | | | | |
| D. Wastewater treatment and discharge | | | | | | | | | | | | |
| E. Other (please specify) | | | | | | | | | | | | |
| Memo items | | | | | | | | | | | | |
| International bunkers | | | | | | | | | | | | |
| Aviation | | | | | | | | | | | | |
| Navigation | | | | | | | | | | | | |
| CO ₂ emissions from biomass | | | | | | | | | | | | |
| CO ₂ captured | | | | | | | | | | | | |
| Indirect CO ₂ (if available) (10) | | | | | | | | | | | | |

Notation: t signifies the first future year ending with 0 or 5 immediately following the reporting year

Notes:

(1) Consistency with the data reported under Article 8 of this Regulation is encouraged.

(2) Use of notation keys: as regards the terms of use defined in the 2006 IPCC Guidelines for National Greenhouse Gas Inventories (chapter 8: reporting guidance and Tables), the notation keys of IE (included elsewhere), NO (not occurring), C (confidential) and NA (not applicable) may be used, as appropriate when projections do not yield data on a specific reporting level (see 2006 IPCC Guidelines).

The use of the notation key NE (Not Estimated) shall be restricted to the situation where a disproportionate amount of effort would be required to collect data for a category or a gas from a specific category that would be insignificant in terms of the overall level and trend in national emissions. In these circumstances a **Contracting Party** shall list all categories and gases from categories excluded on these grounds, together with a justification for exclusion in terms of the likely level of emissions or removals and identify the category as 'not estimated' using the notation key 'NE' in the reporting Tables.

(3) Unspecified mix of HFCs and PFCs is to be reported only if emissions are projected, for which it is not possible to report them under HFCs or under PFCs.

(4) Emissions in the scope of Directive 2003/87/EC.

(5) Emissions in the scope of Regulation (EU) 2018/842.

(6) It shall be reported to which inventory submission (year, version) the base year was calibrated.

(7) Values for t-5 shall only be provided when t-5 is after the projection base year.

(8) ODS - ozone depleting substances.

(9) For the purposes of reporting, the signs for removal shall always be negative (-) and the signs for emissions shall be positive (+). If the information requested in Table 1b is provided in full, this section does not need to be reported.

(10) Projected indirect CO₂ emissions reported in this Table are part of the projected total greenhouse gas emissions (excluding and including LULUCF) and shall be reported as such if available and projected separately from the other reported emissions.

Table 1b:

| | | 1 | | | | | | | | | | | | | | |
|--|-----------------------------|--|-----------------|----------------------|-----------|------------|-------------|-------------|--------|-----------------------------|---|-------|--------|---------|--|--|
| Indicator (1)/ numerator/ denominator | Unit | Guidance/defenition | Guid- | Indica- | v | Vith me | exi easu | stin res | g | With additio al measures | | | | n- s | | |
| | | | ance/ source | tor used (Yes/No) | Base year | t | t + 5 | t + 10 | t + 15 | Base year | t | t + 5 | t + 10 | t + 15 | | |
| Carbon Intensity of the overall economy | tCO ₂ eq/ GDP | EUR (2016); Carbon intensity to be calculat- ed with GDP as defined by Eurostat | | | | | | | | | | | | | | |
| GHG intensity of domestic power and heat gener- ation | tCO ₂ / MWh | MWh of gross electricity and heat generation as defined by Eurostat | | | | | | | | | | | | | | |
| GHG intensity of final energy con- sumption by sector | | | | | | | | | | | | | | | | |
| Industry | tCO ₂ eq/ toe | | | | | | | | | | | | | | | |
| Residential | tCO ₂ eq/ toe | | | | | | | | | | | | | | | |
| Tertiary | tCO ₂ eq/ toe | | | | | | | | | | | | | | | |
| Transport | tCO ₂ eq/ toe | | | | | | | | | | | | | | | |
| Passenger trans- port (when avail- able) | tCO ₂ eq/ toe | | | | | | | | | | | | | | | |
| Freight transport (when available) | tCO ₂ eq/ toe | | | | | | | | | | | | | | | |
| Add a line for each other indicator | | | | | | | | | | | | | | | | |

Table 2: Indicators to monitor and evaluate projected progress of policies and measures if used

Notation: t signifies the first future year ending with 0 or 5 immediately following the reporting year

Notes:

(1) Please add a row per indicator used in the projections.

| | Comment for guidance | | | EUR (2016) (8) | EUR (2016) | EUR (2016) | EUR (2016) | EUR (2016) | EUR (2016) | EUR (2016) | EUR (2016) | | |
|--|---|--|------------|------------------------------------|---------------------------------|-----------------------------------|---|--|---------------------------------------|--|---------------------------------------|----------------------|---------------------------|
| | International Aviation in the EU ETS 1:A:3:a Domestic aviation | | | | | | | | | | | | |
| | 5 Waste | | | | | | | | | | | | |
| | 4 LULUCF | | | | | | | | | | | | |
| | 3 Agriculture | | | | | | | | | | | | |
| | 2 Industrial Processes and product use | | | | | | | | | | | | |
| I (6) | 1B Fugitive emissions from fuels | | | | | | | | | | | | |
| nsec | 1:A:4:b Residential | | | | | | | | | | | | |
| leter is | 1:A:4:a Commercial = institutional | | | | | | | | | | | | |
| the param | 1:A:3 Transport ex- cluding 1:A:3:a do- mestic aviation | | | | | | | | | | | | |
| or which 1 | 1:A:2 Manufacturing industries and construction | | | | | | | | | | | | |
| ons f | 1 A:1 Energy industries | | | | | | | | | | | | |
| rojectio | Year of publication of data source | | | | | | | | | | | | |
| ctoral p | Year of publication of data source | | | | | | | | | | | | |
| Se | Data source | | | | | | | | | | | | |
| Default unit | | | Count | % | EUR million | EUR million | EUR million | EUR million | EUR million | EUR million | EUR million | Thousands | inhabitants/ household |
| | t + 15 | | | | | | | | | | | | |
| | t + 10 | | | | | | | | | | | | |
| Values | t | | | | | | | | | | | | |
| | t - 5 | | | | | | | | | | | | |
| | Base = Reference year | | | | | | | | | | | | |
| Year | Base = Reference year | | | | | | | | | | | | |
| | Parameter / variable part of projections (6) | | | | | | | | | | | | |
| Parameter used (3) ('with existing mea- | sures scenario) | 1. General parameters and variables | Population | Gross Real growth domestic rate | product Constant (GDP) price | Gross value added (GVA)- total | Gross value added (GVA) - agricultures | Gross value added (GVA)- construction | Gross value added (GVA) - services | Gross value added (GVA) – energy sector | Gross value added (GVA) – industry | Number of households | Household size |



| EUR / year | million pkm | million pkm | million pkm | million pkm | million pkm | million pkm | million tkm | million tkm | million tkm | million tkm | million tkm | million tkm | million tkm | million tkm |
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| Disposable income of households | Number of passenger-ki- lometres (<u>all modes</u>) | Number of passenger-ki- lometres – road | Of which public road transport | Of which private cars | Of which motorcycles | Of which buses | Number of passenger- kilometres – rail | Number of passenger- kilometres – domestic aviation | Number of passenger- kilometres – international aviation | Number of passenger- kilometres – domestic navigation | Freight transport tonnes-kilo metres (all modes) | Freight transport tonnes-kilometres - road | Freight transport tonnes-kilometres - rail | Freight transport tonnes-kilometres – international aviation |

| | EUR (2016); Indicate if | Commission recommenda- tion has been | tollowed; tor calorific values | use values published by Eurostat | EUR (2016); Indicate if | Commission recommenda- tion has been followed | EUR (2016); Indicate if | Commission recommenda- | tion has been followed; for | calorific values | use values published by | Eurostat | EUR (2016); Indicate if Commission | recommenda- tion has been followed |
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| million tkm | <i>either</i> EUR/ GJ | <i>or</i> EUR/tae | | | <i>either</i> EUR/ GJ | or EUR/toe | <i>either</i> EUR/ GJ | or EUR/toe | | | | | EUR/EUA | |
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| nsport ometres – do- igation (inland : and national | Coal | | | | Crude Oil | | Natural gas | | | | | | bon price | |
| Freight trar tonnes-kilo mestic navi waterways maritime) | Interna- tional | (whole- sale) fuel import | prices | | | | | | | | | | EU ETS carl | |

| EUR (2016) | USD (2016) | | | for calorific values use val- ues published by Eurostat | _ | | | | | | | | | | | | |
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| EUR/ currency | USD/ currency | Count | Count | - | | ktoe | ktoe | ktoe | ktoe | ktoe | ktoe | ktoe | ktoe | ktoe | ktoe | ktoe | |
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| xchange rates EURO (for ion- EURO countries), if ipplicable | xchange rates US DOL- AR, if applicable | Number of heating legree days (HDD) | Number of cooling legree days (CDD) | 2. Energy balances ind indicators | 1.1 Energy supply | ndigenous Production iy fuel type (total) | olids | lic | Jatural gas | Juclear | kenewable energy ources | Vaste and other | let imports Electricity | āross inland consump- ion by fuel type source total) | olid fossil fuels | Crude oil and petroleum vroducts | - |

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| Nuclear energy | Electricity | Derived heat | Renewables | Waste | Other | 2.2 Electricity and heat | Gross electricity genera- tion (total) | Nuclear energy | Solids | Oil (incl. refinery gas) | Natural gas (including derived gases) | Renewables | Other fuels (hydrogen, methanol) | Heat generation from thermal power gener- ation | Heat generation from combined heat and power plants, including industrial waste heat | 2.3 Transformation sector | Fuel inputs to thermal power generation | Solids | Oil |
| Gas | | ttoe | | | | | |
|--|---|------|--|--|--|--|--|
| Fuel inputs to other conversion processes | ~ | toe | | | | | |
| 2.4 Energy consump- tion | | | | | | | |
| Final energy consump- tion | ~ | toe | | | | | |
| Solids | ~ | toe | | | | | |
| Oil | ~ | toe | | | | | |
| Gas | ~ | toe | | | | | |
| Electricity | ~ | toe | | | | | |
| Derived heat | ~ | toe | | | | | |
| Renewable energy | ~ | toe | | | | | |
| Thereof ambient heat | ~ | toe | | | | | |
| Other | ~ | toe | | | | | |
| Industry | × | toe | | | | | |
| Solids | × | toe | | | | | |
| Oil | ~ | toe | | | | | |
| Gas | ~ | toe | | | | | |
| Electricity | × | toe | | | | | |
| Heat | ~ | toe | | | | | |
| Renewable energy | × | toe | | | | | |
| Other | ~ | toe | | | | | |
| Residential | ~ | toe | | | | | |
| Solids | × | toe | | | | | |
| Oil | × | toe | | | | | |
| Gas | ~ | toe | | | | | |
| Electricity | ~ | toe | | | | | |

| Heat | ktoe | | | | | |
|---|------|------|------|------|--|--|
| Renewable energy | ktoe | | | | | |
| Other | ktoe | | | | | |
| Tertiary | ktoe | | | | | |
| Solids | ktoe | | | | | |
| Oil | ktoe | | | | | |
| Gas | ktoe | | | | | |
| Electricity | ktoe | | | | | |
| Heat | ktoe | | | | | |
| Renewable energy | ktoe | | | | | |
| Other | ktoe | | | | | |
| Agriculture/ Forestry | ktoe | | | | | |
| Transport | ktoe | | | | | |
| Solids | ktoe | | | | | |
| Oil | ktoe | | | | | |
| Gas | ktoe | | | | | |
| Electricity | ktoe | | | | | |
| Heat | ktoe | | | | | |
| Renewable energy | ktoe | | | | | |
| Other | ktoe | | | | | |
| thereof passenger trans- port (when available) | ktoe | | | | | |
| thereof freight transport (when available) | ktoe | | | | | |
| thereof international aviation | ktoe | | | | | |
| Other | ktoe | | | | | |

| Final non-energy con- | ktoe | | | | |
|--|----------|--|------|------|------------|
| 2.5 Prices | | | | | |
| Electricity prices by type of using sector | | | | | |
| Residential | EUR(MWh) | | | | |
| Industry | EUR(MWh) | | | | |
| Tertiary | EUR(MWh) | | | | |
| National retail fuel prices (including taxes, per source and sector) | | | | | |
| Coal, industry | EUR/ktoe | | | | EUR (2016) |
| Coal, house holds | EUR/ktoe | | | | EUR (2016) |
| Diesel oil, industry | EUR/ktoe | | | | EUR (2016) |
| Diesel oil, households | EUR/ktoe | | | | EUR (2016) |
| Diesel oil, transport | EUR/ktoe | | | | EUR (2016) |
| Diesel oil, transport pri- vate (when available) | EUR/ktoe | | | | EUR (2016) |
| Diesel oil, transport pub- lic (when available) | EUR/ktoe | | | | EUR (2016) |
| Gasoline, transport | EUR/ktoe | | | | EUR (2016) |
| Gasoline, transport pri- vate (when available) | EUR/ktoe | | | | EUR (2016) |
| Gasoline, transport pub- lic (when available) | EUR/ktoe | | | | EUR (2016) |
| Natural gas, industry | EUR/ktoe | | | | EUR (2016) |
| Natural gas, households | EUR/ktoe | | | | EUR (2016) |

| | | | | | | | | | c | | | | | | | |
|---|-----------------|-----------|----------------|------------------|----------------|----------------|----------------|--|--|---------------------------------------|--|---------------------------------------|-----------|---|---|--|
| | | | 1 000 heads | 1 000 heads | 1 000 heads | 1 000 heads | 1 000 heads | kt nitroge | kt nitroge | kt nitroge | kt nitroge | 1 000 hectares | | t | t | % |
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| 3. Non-CO ₂ emission related parameters | 3.1 Agriculture | Livestock | Dairy cattle | Non-dairy cattle | Sheep | Pig | Poultry | Nitrogen input from application of synthetic fertilizers | Nitrogen input from application of manure | Nitrogen fixed by N-fix- ing crops | Nitrogen in crop residues returned to soils | Area of cultivated organ- ic soils | 3.2 Waste | Municipal solid waste (MSW) generation | Municipal solid waste (MSW) going to landfills | Share of CH4 recovery in total CH4 generation from landfills |

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| | | | | | | | | | | | | | | | | - | |
| | | | | | | | | | | | | | | | | - | |
| | | 1 000 cubic meters | 1 000 cubic meters | 1 000 cubic meters | Yes / No | 1 000 hectares | | 1 000 cubic meters | 1 000 cubic meters | 1 000 cubic meters | 1 000 hectares | 1 000 hectares | 1 000 hectares | 1 000 hectares | 1 000 hectares | | 1 000 hectares |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| 4. LULUCF | 4.1 Managed forest land | Forest harvest removals for <u>energy</u> use | Forest harvest removals for <u>non-energy</u> use | Forest increment | Forest disturbances included in modelling | Forest land remaining forest land | 4.2 Afforested land | Forest harvest removals for energy use | Forest harvest removals for non-energy use | Forest increment | Cropland converted to forest land | Grassland converted to forest land | Wetlands converted to forest land | Settlements converted to forest land | Other land converted to forest land | 4.3 Deforested land | Forest land converted to cropland |

| Forest land converted to grassland | 1 000 hectares |
|--|-------------------|
| Forest land converted to wetlands | 1 000 hectares |
| Forest land converted to settlements | 1 000 hectares |
| Forest land converted to other land | 1 000 hectares |
| 4.4 Managed crop- land | |
| Cropland, remaining cropland | 1 000 hectares |
| Grassland, wetland, settlement or other land converted to cropland | 1 000 hectares |
| Cropland converted to wetland, settlement or other land (excl. forest land) | 1 000 hectares |
| 4.5 Managed grass- land | |
| Grassland remaining grassland | 1 000 hectares |
| Cropland, wetland, settlement or other land, converted to grassland | 1 000 hectares |
| Grassland converted to wetland, settlement or other land | 1 000 hectares |
| 4.6 Managed wetland | |
| Wetland remaining wetland | 1 000 hectares |
| Settlement or other land, converted to wetland | 1 000 hectares |

| Wetland converted to 1 000 hectares | |
|---|---|
| 4.7 Harvested wood products | |
| Gains of Harvested wood kt C kt C | |
| Losses of Harvested kt C kt C | |
| Half-life of Harvested years years wood products (5) | |
| 5. Other parameters and variables | |
| Technology cost as- sumptions used for main relevant technologies: | |
| Add row for each rele- vant technology | |
| Add row for each other relevant parameter | |
| Notes: | |
| (1) Please add a row per country-specific parameter used in the projections at the end of the Tab be variables for certain projection tools used, depending on the models used. | of the Table. Note that this includes the term 'variables' because some of the parameters listed co |
| (2) Only those parameters / variables need to be reported that are part of the projections, either | ns, either input or output. |
| (3) Use of notation keys: the notation keys of IE (included elsewhere), NO (not occurring), C (confid The use of the notation key NE (Not estimated) is for cases where the suggested parameter is nei signifies the first future year ending with 0 or 5 immediately following the reporting year. | , C (confidential), NA (not applicable), and NE (Not estimated/Not used) may be used, as appropriat neter is neither used as a driver nor reported along with the Member States Projections. Notation ar. |
| (4) May include harvested wood products from managed forest land and afforested land. | .br |
| (5) Please specify the types of harvested wood products in the rows below (under 'Add row for ϵ | I row for each other relevant parameter'). |
| (6) To be filled with Yes/No. | |

(8) Any update of this base year for expressing monetary values shall be part of the recommendations by the Commission on harmonised values for key supra-nationally determined parameters under Article 38(3) of this Regulation.

(7) Please specify additional different values for parameters used in different sector models.

Table 5a <...> Table 5b <...> Table 6

Table 7: Key parameters that were varied in the sensitivity analysis

<...>

(Submit for each sensitivity scenario calculated). Only those parameters are to be filled in that were varied in a specific scenario.

| Parameter values in | n sensitivity scenario | | Year | Value | 25 | | | | | Default | |
|--|------------------------|----------------------|-----------------------|-----------------------|-----|---|-------|--------|--------|-------------|-------------------------|
| | | Parameter varied (1) | Base = Reference year | Base = Reference year | t-5 | t | t + 5 | t + 10 | t + 15 | unit | Comment for Guidance |
| General parameters a | nd variables | | | | | | | | | | |
| Population | | | | | | | | | | Count | |
| Gross domestic | Real growth rate | | | | | | | | | % | |
| product (GDP) | Constant prices | | | | | | | | | EUR million | EUR (2016) (2) |
| Gross value added (G | VA) — total | | | | | | | | | EUR million | EUR (2016) |
| Gross value added (GVA) – total Gross value added (GVA) – agriculture | | | | | | | | | | EUR million | EUR (2016) |
| Gross value added (G | VA) – construction | | | | | | | | | EUR million | EUR (2016) |
| Gross value added (G | VA) – services | | | | | | | | | EUR million | EUR (2016) |
| Gross value added (G | VA) – energy sector | | | | | | | | | EUR million | EUR (2016) |
| Gross value added (G | VA) – industry | | | | | | | | | EUR million | EUR (2016) |
| International | Coal | | | | | | | | | EUR/GJ | EUR (2016) |
| (wholesale) fuel import prices | | | | | | | | | | EUR/toe | EUR (2016) |
| | Crude Oil | | | | | | | | | EUR/GJ | EUR (2016) |
| | | | | | | | | | | EUR/toe | EUR (2016) |
| | Natural gas | | | | | | | | | EUR/GJ | EUR (2016) |
| | | | | | | | | | | EUR/toe | EUR (2016) |
| EU ETS carbon price | | | | | | | | | | EUR/ EUA | EUR (2016) |
| Number of heating de | egree days (HDD) | | | | | | | | | Count | |

| Number of cooling degree days (CDD) | | | | | Count | |
|--|--|--|--|--|-------------|--|
| Number of passenger-kilometres (all modes) | | | | | million pkm | |
| Freight transport tonnes-kilometres (all modes) | | | | | million tkm | |
| (Add rows for further parameters that were varied) | | | | | | |

Note: add rows at the end of the Table for other parameters varied. Leave those lines empty for which parameters were not varied.

(1) Indicate with Yes / No.

(2) Any update of this base year for expressing monetary values shall be part of the recommendations by the Commission on harmonised values for key supra-nationally determined parameters under Article 38(3) of this Regulation.