

## Republika e Kosovës Republika Kosovo - Republic of Kosovo Qeveria-Vlada-Government

ADMINISTRATIVE INSTRUCTION (GRK) - NO.06/2025 FOR THE METHODOLOGY OF MONITORING, REPORTING OF GREENHOUSE GAS EMISSIONS AND OTHER INFORMATION RELATED TO CLIMATE CHANGE AT THE NATIONAL LEVEL

Administrative Instruction (GRK) - No.06/2025 for the methodology of monitoring, reporting of greenhouse gas emissions and other information related to climate change at the national level, has been approved in the 277-th Meeting of the Government of the Republic of Kosovo, with decision Nr. 03/277, të datës 27.11.2025.

#### Government of the Republic of Kosovo,

In compliance of Article 93 paragraph 4 of the Constitution of the Republic of Kosovo, Article 11 paragraph 6 of Law No. 08/L-250 on Climate Change (Official Gazette No. 1, dated 05.01.2024), Article 8, paragraph 4, sub-paragraph 4.5 of the Law No. 08/L-117 for the Government of the Republic of Kosovo (Official Gazette No. 34/22 of November 18, 2022), as well as article 78 paragraph 6 sub-paragraph 2 of the Government Work Regulation No. 17/2024.

#### Approves:

ADMINISTRATIVE INSTRUCTION (GRK) NO. 06/2025 FOR THE METHODOLOGY OF MONITORING, REPORTING OF GREENHOUSE GAS EMISSIONS AND OTHER INFORMATION RELATED TO CLIMATE CHANGE AT THE NATIONAL LEVEL CHAPTER I GENERAL PROVISIONS

### Article 1 Purpose

This Administrative Instruction aims to establishes a mechanism for monitoring and reporting of all anthropogenic emissions by source and absorption of greenhouse gases, review and verification of greenhouse gas emissions and other information, ensuring transparency, accuracy, consistency, comparability and completeness in the established time frames.

### Article 2 Scope

- 1. The provisions of this Administrative Instruction apply to:
  - 1.1. Legal entities, organizations and other institutions that carry out activities in the sectors and emission categories of the Intergovernmental Panel on Climate Change (IPCC) and Greenhouse gases emission categories for reporting the data necessary for the calculation of greenhouse gas emissions for the operation of the inventory of Greenhouse gases emission system;
  - 1.2. Preparation of projections of anthropogenic emissions by sources and removals by sinks of greenhouse gases and policies and measures relating thereto.
- 2. This Administrative Instruction is partially in accordance with Regulation (EU) 2018/1999 of December 11, 2018 on the Governance of the Energy Union and Climate Action, included and adapted to the Decision of the Ministerial Council 021/14/MC-EnC of November 30, 2021 for the inclusion of Regulation (EU) 2018/1999 in the acquis communautaire of the Community of Energy and amending Annex I of the Treaty and amended by Ministerial Council Decision 2022/02/MC-EnC of December 15, 2022. and Commission Implementing Regulation (EU) 2020/1208 of August 7, 2020 on the structure, format, submission processes and review of information reported by Member States in accordance with Regulation (EU) 2018/1999 of the European Parliament and of the Council and that repeals Commission Implementing Regulation (EU) No 749/2014.

# Article 3 Definitions

- 1. Terms used in this Administrative Instruction shall have the following meanings:
  - 1.1. Sectors and categories of greenhouse gas emissions according to the Intergovernmental Panel on Climate Change sectors and categories as listed in Annex I of this Administrative Instruction as defined by the 2006 Intergovernmental Panel on Climate Change Guidelines and aggregated in accordance with decision 5/CMA.3- Guidance operationalizing the modalities, procedures and guidelines for the enhanced transparency framework referred to in Article 13 of the Paris Agreement;
  - 1.2. **GHG** The greenhouse gases defined in Article 3, paragraph 1, subparagraph 1.7 of Law No. 08/L-250 on Climate Change.;
  - 1.3. National system to monitor policies, measures and projections a system that includes all institutional, legal and procedural mechanisms of monitoring and control in performing obligations to reduce greenhouse gas emissions, reporting on policies, measures and projections of emissions of greenhouse gases;
  - 1.4. **GHG Inventory with provisional data** GHG inventory which is compiled in the actual year based on preliminary collection and analysis of greenhouse gas emissions data for a a specified previous year, These provisional data serve as an initial estimate and are subject to further verification and refinement before finalization.
  - 1.5. **GHGE** Greenhouse Gas Emissions
  - 1.6. **Quality assurance or "QA" -** a planned system of review procedures to ensure that data quality objectives are met and that the best possible estimates and information are reported to support the effectiveness of the quality control programme;
  - 1.7. **Quality control or "QC" -** a system of routine technical activities to measure and control the quality of the information and estimates compiled with the purpose of ensuring data integrity, correctness and completeness, identifying and addressing errors and omissions, documenting and archiving data and other material used, and recording all quality assurance activities;
  - 1.8. **Key categories -** are those IPCC categories of emissions which, when summed together in descending order of magnitude, add up to over ninety-five percent (95%) of total emissions (level assessment) or the trend of the inventory in absolute terms;
  - 1.9. **Policies and measures** all instruments which aim to contribute to the implementation of commitments which may include those that do not have the limitation and reduction of greenhouse gas emissions or change in the energy system as a primary objective;
  - 1.10. Existing policies and measures means implemented and adopted policies and measures;
  - 1.11. **Implemented policies and measures** The policies and measures adopted that are applicable as of the date of submission of the report in accordance with Article 17 of this Administrative Instruction;

- 1.12. **Adopted policies and measures** means policies and measures for which an official Government Decision has been made by the date of submission of the report pursuant to Article 18 of this Administrative Instruction and there is a clear commitment to proceed with implementation;
- 1.13. **Planned policies and measures** means options that are under discussion and that have a realistic chance of being adopted and implemented after the date of submission of the report pursuant to Article 18 of this Administrative Instruction;
- 1.14. "Ex ante" assessment of policies and measures an evaluation of the projected effects of a policy or measure;
- 1.15. "Ex post" assessment of policies and measures an evaluation of the past effects of a policy or measure;
- 1.16. **Projections** means forecasts of anthropogenic greenhouse gas emissions by sources and removals by sinks or developments of the energy system, including at least quantitative estimates for a sequence of four (4) future years ending with zero (0) or five (5) immediately following the reporting year;
- 1.17. **Projections without measures -** projections of anthropogenic greenhouse gas emissions by sources and removals by sinks that exclude the effects of all policies and measures which are planned, adopted or implemented after the year chosen as the starting point for the relevant projection;
- 1.18. **Projections with measures** projections of anthropogenic greenhouse gas emissions by sources and removals by sinks that encompass the effects, in terms of greenhouse gas emissions reductions, or developments of the energy system of policies and measures that have been adopted and implemented;
- 1.19. **Projections with additional measures** projections of anthropogenic greenhouse gas emissions by sources and removals by sinks or developments of the energy system that encompass the effects, in terms of greenhouse gas emissions reductions, of policies and measures which have been adopted and implemented to mitigate climate change or meet energy objectives as well as policies and measures which are planned for that purpose;
- 1.20. **Sensitivity analysis** an investigation of a model algorithm or an assumption to quantify how sensitive or stable the model output data are in relation to variations in the input data or underlying assumptions. It is carried out by varying input values or model equations and by observing how the model output varies correspondingly;
  - 1.21. **The Ministry** The Ministry responsible for climate change;
  - 1.22. **KEPA** Kosovo Environment Protection Agency;
  - 1.23. LULUCF Land Use Land Use Change and Forestry;
  - 1.24. **IPCC** Intergovernmental Panel on Climate Change;

- 1.25. **HFC and PFC** hydrofluorocarbons, perfluorocarbons;
- 1.26. **Key Category** A key category in the GHG inventory is one that is prioritised within the national inventory system because its estimate has a significant influence on a country's total inventory of greenhouse gases in terms of the absolute level, the trend, or the uncertainty in emissions and removals. Whenever the term key category is used, it includes both IPCC source and sink categories;
- 1.27. **Direct greenhouse gases (GHG)** Carbon dioxide (CO<sub>2</sub>), Methane (CH<sub>4</sub>), Nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), Hexafluoride (SF<sub>6</sub>) as listed in the Law governing the Climate Change.
- 2. The terms and expressions used in this Administrative Instruction have the same meaning as defined in the Law No. 08/L-250 on Climate Change.

### CHAPTER II QUALITY ASSURANCE, QUALITY CONTROL, AND REPORTING

# Article 4 **Quality Assurance and Quality Control**

- 1.The KEPA administers, maintains, and continuously updates the National Inventory System in accordance with the relevant Climate Change Law, and includes:
  - 1.1. the determination of quality objectives and the preparation of a plan for ensuring the quality of the inventory and quality control, including general quality and quality control procedures and specific categories of QC in accordance with the IPCC Guidelines;
  - 1.2. Procedures for completing emissions estimates and to estimate any data missing from its national GHG inventory;
  - 1.3. Annual consistency checks and regular review plan of greenhouse gas inventories;
  - 1.4. The assessment of the uncertainties of the GHG inventory and interaction with the QA/QC procedures;
  - 1.5. Improvement plans to address the recommendations and encouragements identified in the review process;
  - 1.6. The reporting, documentation and archiving system.
- 2. The KEPA develops general and specific inventory quality control procedures in accordance with the QA/QC plan as defined in paragraph 1, subparagraph 1.1 of this article.

- 3. To be able to undertake the annual consistency checks referred to paragraph 1.3 and to improve the estimate of fluorinated gases in the national greenhouse gas inventories the KEPA shall have access to:
  - 3.1. Data and methods reported for activities and installations;
  - 3.2. Emissions, underlying data and methodologies;
  - 3.3. Data collected through the reporting systems on fluorinated gases in the relevant sectors;
  - 3.4. Emissions, underlying data and methodologies reported by facilities holding Environmental Permit in accordance with the Environmental Protection Law for the purpose of preparing national GHG inventories;
- 4. Energy statistics are reported to the Secretariat of the Energy Community and the European Environment Agency.

# Article 5 Reporting

- 1.The KEPA defines the reporting procedures for the relevant sectors with the aim of obtaining required sectoral GHG Inventory data on activities and emission factors and perform QA/QC procedures as referred in paragraph 1.1 of Article 4 of this Administrative Instruction.
- 2.The determination of rules and procedures for the functioning of the National Inventory System and for the preparation of inventory assessments of GHGs and the National Inventory Report is established by the sub-legal act on Climate Change in implementation of the relevant Law.

### CHAPTER III DATA REQUIREMENTS

# Article 6 Energy sector data

- 1. The energy data required for the preparation of the GHG Inventory are data from the questionnaires used for reporting to Energy Community, the annual energy balance published on the website of the Kosovo Agency of Statistics and information on fuel stock, purchase, trade and fuel consumption from selected legal entities falling under the GHG inventory key categories.
- 2. The data related to transport sector required for the preparation of the GHG Inventory are:
  - 2.1. Data from the motor vehicle registry administered by the Ministry responsible for Internal Affairs.
  - 2.2. Data on public road traffic flows from the Ministry responsible for Infrastructure.

- 2.3. Data on fuel consumption for railway transport of a company or other legal entity carrying out rail transport in the Republic of Kosovo
- 2.4. Data of fuels consumption on the Prishtina International Airport

# Article 7 Data from the industrial processes sector and product use

- 1. Data related to industrial processes required for the preparation of the GHG Inventory are data used by Kosovo Agency of Statistics for the preparation of yearly and monthly publications, statistical bulletins, press releases, other data from statistical surveys.
- 2. If the KEPA cannot acquire adequate and sufficiently detailed data from the Kosovo Agency of Statistics, it may request the legal entities who produce clinker, lime, lead and zinc or use lubricants, paraffin waxes and solvents to provide data on production inputs and outputs or the use of those products through a report in the electronic format and within the timeframe as specified by the KEPA.
- 3. Legal entities holding a permit for the discharge of Greenhouse Gas Emissions in accordance with the Climate Change Law shall submit to AMMK the data on the production and use of products, in accordance with paragraph 2 of this article, only for installations that are not covered by the permit.
- 4. Data related to the use of products containing greenhouse gases required for the preparation of the GHG Inventory are data of the Customs Administration. In addition, if KEPA cannot acquire adequate data from Customs Administration it may request the legal entities who imports, use or placing on the market the GHG to report on the annual import, exports, stock change and the use of gasses through a report in the electronic a format and within the frame specified by the KEPA.

# Article 8 Data from the agriculture sector

- 1. The data required for the preparation of the GHG Inventory are data from agricultural activities that cause GHG emissions, which are available to the Ministry responsible for Agriculture in accordance with the relevant Agriculture Law, as well as data collected and used by the Kosovo Agency of Statistics for the preparation of annual and monthly publications, and other statistical data.
- 2. Data on the production, import, and placing on the market of fertilizers and active substances used for fertilizer production shall be submitted to KEPA by their producers and importers through an electronic report, within the deadline established by KEPA.
- 3. Additionally, KEPA may request the data on manure management practices from agricultural households or legal entities that would need to require environmental permit for their operations. Such data shall be submitted to KEPA through an electronic report and within the time frame specified by the KEPA.

# Article 9 Data from LULUCF sector

Data related to land use, land use changes and forestry required for the preparation of the GHG Inventory are data from the Ministry responsible for agriculture and forestry affairs, the Statistical Agency of Kosovo, the Kosovo Cadastral Agency, Kosovo Forestry Agency and the authorities responsible for the adoption and amendment of planning acts defining the purpose of land use, relating to the use of land.

# Article 10 Data from waste sector

- 1.Data related to waste management required for the preparation of the GHG Inventory are data on waste from the Kosovo Agency of Statistics and Environmental Information System in accordance with the Law governing on Waste Menagement.
- 2 In addition to the data referred to in paragraph 1 of this Article, KEPA may use additional data from legal entities and municipalities operating solid waste disposal sites, waste incineration facilities, facilities for mechanical and/or biodegradable treatment of waste and from operators of wastewater treatment plants, wastewater collection and removal and legal entities and institutions responsible for wastewater infrastructure.
- 3.Data related to waste management, as referred to in paragraph 2 of this Article shall be submitted to the KEPA by Municipalities, legal entities and other institutions through an electronic report and within the time frame specified by the KEPA.

#### Article 11 Additional data

- 1. The KEPA, for the purpose of drafting the GHG Inventory, also uses:
  - 1.1. Activity data and emission factors and GHG emissions from verified reports of installation operators in accordance with the Law governing Climate Change;
  - 1.2. Fluorinated GHG, in accordance with the Law governing Air Protection;
  - 1.3. From the Cadastre of Polluters in Kosovo in accordance with the Law governing Environmental Protection;
- 1.4. From the stationary sources contained in the Air Information system in accordance with the Law governing Air Protection from Pollution.
- 2. The KEPA also uses other data from other sectors for the purpose of preparing the GHG Inventory.
- 3. The KEPA may, for the assessment of emissions in the preparation of the GHG Inventory, conduct consistency, accuracy and completeness checks of the data used in paragraph 1 of Article 6 of this

Administrative Instruction KEPA shall report the results of these checks to the Ministry responsible for energy and Kosovo Agency of Statistics.

#### Article 12 Provisional data

For the preparation of the GHG Inventory with preliminary data, the KEPA uses the data referred to in Article 6-11 of this Regulation, as well as data from the regulations governing the content of the GHG Inventory and the GHG Inventory Report.

#### Article 13 Confidential data

- 1. If the data requested under Articles 6 to 11 of this Administrative Instruction are confidential and protected by law, the reporting party is obliged to provide KEPA with a reference to the legal acts under which the data are considered confidential.
- 2. KEPA may receive information deemed as commercially sensitive or proprietary information from reporting institutions. KEPA shall hold all such information in strict confidence and use it solely for the purpose for which it was provided, unless otherwise expressly permitted in writing by the reporting institution.
- 3. KEPA shall implement and appropriate technical and organizational measures to protect the confidentiality and integrity of the information provided by the reporting institution, in accordance with best practice and legislation in force.

### Article 14 Agreements with data providers

- 1. KEPA shall conclude an agreement with legal entities and organizations from Article 6-11 of this Administrative Instruction on the data submission needed for the preparation of GHG inventory and other data needed for the functioning of the National Inventory System in accordance with the Law governing Climate Change within the period of twelve (12) months from entering into force of this Administrative Instruction.
- 2. The agreements referred to in paragraph 1 of this Article include at least the data necessary for the preparation of the GHG Inventory with provisional data referred to in Article 12 of this Administrative Instruction, as well as reporting frequency, responsible personnel for implementation of agreement, the means of submission, format and deadline for their submission as well as provisions for resubmission of revised data.

### Article 15 Use of Information

All data and information provided by the reporting institution to KEPA or the Ministry shall be used exclusively for the purposes outlined in the agreement between KEPA and the reporting institution. KEPA shall not use this information for any other purposes, without the express written consent of the reporting institution.

# CHAPTER IV NATIONAL SYSTEM FOR POLICIES, MEASURES AND PROJECTIONS

# Article 16 Policies, measures and projections

1. KEPA shall establish, manage, and continuously improve the National System for Reporting on Policies and Measures, as well as for reporting projections of anthropogenic greenhouse gas (GHG) emissions by sources and removals by sinks. This system shall include the evaluation of policies and the preparation of projections of anthropogenic GHG emissions by sources and removals by sinks..

#### 1. KEPA shell report:

- 2.1. datas on policies and measures and projections of anthropogenic GHG by sources and removals by sinks;
- 2.2. When necessary, the use and application of data, methods, and models;
- 2.3. Implementation of quality assurance and quality control activities and sensitivity analysis;
- 3. KEPA should ensure the timeliness, transparency, accuracy, consistency, comparability and completeness of the reported information.
- 4. The line ministries shall ensure that the objectives of their strategic documents and plans are aligned with the latest GHG projections and with the objectives of strategic documents and plans related to climate change, such as the Decarbonization Strategy, the Adaptation Strategy, and the National Energy and Climate Plan.
- 5. The Ministry in close collaboration with Ministry responsible for Energy and other stakeholders shall prepare and regularly update unified projections serving for the purpose of preparation and update of Low-Carbon Developing Strategy, National Energy and Climate plan, National Determined contributions and if needed other planning documents in accordance with the Law governing Air Protection from Pollution.

# Article 17 Data on implementation of actions, policies and measures

1. Ministries and other Institutions responsible for preparation and- implementation of national or
local policies with the effects on GHG emissions have the responsibility to report by 31 July of the
current year and every year thereafter to the KEPA the following information on its actions, policies
and measures:

1.1.	Name;	

- 1.2. Description;
- 1.3. Objectives;

- 1.4. Type of instrument (regulatory, economic instrument or other);
- 1.5. Status (planned, adopted or implemented);
- 1.6. Sector(s) affected (energy, transport, industrial processes and product use, agriculture, LULUCF, waste management or other);
- 1.7. Gases affected;
- 1.8. Start year of implementation;
- 1.9. Implementing entity or entities.
- 1.10. Estimates of expected and achieved GHG emission reductions for its actions, policies and measures
- 1.11. Description of the methodologies and assumptions used to estimate the GHG emission reductions or removals due to each action, policy and measure, to the extent possible
- 2. Ministries and other Institutions as referred to in paragraph 1 of this article should also provide the following information for each action, policy and measure reported:
  - 2.1. Costs;
  - 2.2. Non-GHG mitigation benefits;
  - 2.3. How the mitigation actions as identified interact with each other, as appropriate.
- 3. In addition, Ministries and other Institutions as referred to in paragraph 1 identify and report:
  - 3.1. Actions, policies and measures that are no longer in place compared with the most recent biennial transparency report, and explain why they are no longer in place;
  - 3.2. Actions, policies and measures that influence GHG emissions from international transport;
  - 3.3. Actions that have a significant impact on greenhouse gas emissions or removals, as well as those affecting the main categories in the national greenhouse gas inventory;
  - 3.4. To the extent possible, provide information about how its actions, policies and measures are modifying longer-term trends in GHG emissions and removals.
- 4. Ministries and other Institutions as referred to in paragraph 1 of this Article:
  - 4.1. Provide relevant information on indicators' denominators needed for the preparation of indicators as listed in Table 5 of Annex 2 of this Administrative Instruction, and
  - 4.2. To the extent possible, the assessment of economic and social impacts of response measures.

5. Ministries and other Institutions as referred to in paragraph 1 of this article should where appropriate use reporting form included in the Table 2, 3 and 4 of the Annex 2 of this Administrative Instruction.

# Article 18 Reporting on implementation of policies and measures in Kosovo

- 1. Based on the information received pursuant to paragraph 1 of Article 17 of this Administrative Instruction the Ministry by 15 March 2027, and every two (2) years thereafter prepare a Report on policies and measures with:
  - 1.1. A description of National System of GHG for reporting on policies and measures, or groups of measures, and for reporting on projections of anthropogenic greenhouse gas emissions by sources and removals by sinks pursuant to Article 16 of this Administrative Instruction, where such description has not already been provided, or information on any changes made to that system where such a description has already been provided.
  - 1.2. Information on national policies and measures, or groups of measures, and on implementation of Energy Community policies and measures, or groups of measures, that limit or reduce greenhouse gas emissions by sources or enhance removals by sinks, presented on a sectoral basis and organised by gas or group of gases (HFCs and PFCs) listed in Annex 1 of the Law on Climate Change. That information shall refer to applicable and relevant national policies and shall include:
    - 1.2.1 the objective and a short description of the policy or measure;
    - 1.2.2. the type of policy instrument;
    - 1.2.3. the status of implementation of the policy or measure or group of measures;
    - 1.2.4. where used, indicators to monitor and evaluate progress over time;
    - 1.2.5. where available, quantitative estimates of the effects on emissions by sources and removals by sinks of greenhouse gases broken down into:
      - 1.2.5.1 the results of ex ante assessments of the effects of individual or groups of policies and measures on the mitigation of climate change. Estimates shall be provided for a sequence of four future years ending with 0 or 5 immediately following the reporting year, with the distinction of emissions from installations, emissions from LULUCF and other emissions excluding emissions from international aviation and marine bunkers;
      - 1.2.5.2 the results of ex post assessments of the effects of individual or groups of policies and measures on the mitigation of climate change, with the distinction of emissions from installations, emissions from LULUCF and other emissions excluding emissions from international aviation and marine bunkers:
    - 1.2.6. where available, estimates of the projected costs and benefits of policies and measures, as well as estimates, as appropriate, of the realized costs and benefits of policies and measures;

- 1.2.7. all existing references to the assessments of the costs and effects of national policies and measures, to information in the implementation of Energy Community policies and measures that limit or reduce GHG emissions by sources or enhance removals by sinks and to the underpinning technical reports;
- 1.3. information on planned additional national policies and measures, or groups of measures, envisaged with a view to limiting GHG emissions beyond national commitments;
- 2. For reporting the information om national system for policies and measures pursuant to paragraph 1.1 of this Article the Ministry shall use the form as contained in Table 1 of the Annex 2 of this Administrative Instruction.
- 3. For reporting the information pursuant to paragraph 1.2 of this Article the Ministry shall use the form as contained in Table 2,3 and 4 of the Annex II of this Administrative Instruction.
- 4. The Ministry shall make available to the public, in electronic form, any relevant assessment of the costs and effects of national policies and measures, where available, and any relevant information on the implementation of policies and measures that limit or reduce greenhouse gas emissions by sources or enhance removals by sinks along with any existing technical reports that underpin those assessments. Those assessments should include descriptions of the models and methodological approaches used, definitions and underlying assumptions.

### Article 19 Reporting on projections

- 1. By 15 March 2027 and every two (2) years thereafter, the KEPA shall prepare projections and report on national projections of anthropogenic greenhouse gas emissions by sources and removals by sinks, organized by gas or group of gases (HFCs and PFCs) listed in the Law governing Climate Change and by sector. These projections include quantitative assessments for a sequence of four (4) upcoming periods.
- 2. Notwithstanding the biennial reporting schedule as referred to in paragraph 1 of this Article, the KEPA shall update the projections and prepare the report, particularly under the following circumstances:
  - 2.1. Socio or macroeconomic environment has changed significantly;
  - 2.2. When new and additional polices and measures with significant effect on GHG emissions are adopted and implemented;
  - 2.3. Preparing or updating strategic documents in accordance with Law governing Climate Change.
- 3. National projections take into consideration any planed, adopted and implemented policies and measures and include:

- 3.1. Projections without measures where available, projections with measures, and, where available, projections with additional measures;
- 3.2. Total greenhouse gas projections and separate estimates for the projected greenhouse gas emissions from installations; emissions from land use land use change and forestry and other emissions excluding emissions from international aviation and marine bunkers;
- 3.3. The impact of policies and measures identified pursuant to Article 8 of this AI. Where such policies and measures are not included, this shall be clearly stated and explained;
- 3.4. Results of the sensitivity analysis performed for the projections and information on the models and parameters used;
- 3.5. All relevant references to the assessment and the technical reports that underpin the projections referred to in paragraph 1 of this Article.
- 4. In addition, the report on national GHG projections shall contain the following information on:
  - 4.1. Models and approaches used, and key underlying assumptions and parameters used for projections;
  - 4.2. If relevant, changes in the methodology since previous emission projections report;
  - 4.3. Assumptions on policies and measures included in the 'with measures' projections and 'with additional measures' projections,
  - 4.4. Sensitivity analysis for any of the projections, together with a brief explanation of the methodologies and parameters used and which parameter were varied:
    - 4.4.1. For the total reported greenhouse gas emissions,
    - 4.4.2. Split on total emissions from installations and emissions from land use land use change and forestry and other emissions excluding emissions from international aviation and marine bunkers where such information is available;
  - 4.5. Progress indicators prepared in accordance with paragraph 2 of Article 20 of this Administrative Instruction to assess progress toward the targets set in the Low-Carbon Development Strategy, the National Energy and Climate Plan, and the Nationally Determined Contributions.
  - 4.6. Projections on a sectoral basis and by gas, as well as for the national total, using a common metric consistent with that in its national inventory report.
- 5. Projections in the report shall be:
  - 5.1. Presented relative to actual inventory data for the preceding years
  - 5.2. Provided with and without LULUCF

- 5.3. Presented in graphical and tabular formats
- 6. For reporting projections in tabular form, the KEPA shall to the extent possible use Tables as contained in Annex 3 of this Administrative Instruction.
- 7. KEPA shall make available to the public, in electronic form, their national projections of greenhouse gas emissions by sources and removals by sinks along with relevant technical reports that underpin those projections. Those projections should include descriptions of the models and methodological approaches used, definitions and underlying assumptions.

# Article 20 Assessment and reporting on progress

- 1. Based on the information provided in this Administrative Instruction and for the purpose of assessing whether sufficient progress has been made, the Ministry must conduct an annual evaluation of progress in meeting its national target and international obligations, based on the most recent Greenhouse Gas Inventory, as well as the information specified in Articles 17 and 18 of this Administrative Instruction.
- 2. In addition to the information submitted in accordance with Article 17 and 18 of this Administrativ Instruction the Ministry in coordination with the Council on Climate Change and other relevant ministries and stakeholders relevant for the achievement of national emission reduction target shall identify and prepare progress indicators to track progress towards the implementation and achievement of its emission reduction target.
- 3. The Ministry shall ensure that the indicators as referred in paragraph 2 of this Article will be specific, measurable, time-bound, achievable and relevant for the achievement of national emission targets and have quantifiable and at least:
  - 3.1. A clear description and the definition
  - 3.2. Reference year and value, target value in a year relevant for the achievement of national emission reduction target and any intermediate target values between the reference year and the year relevant for the achievement of national emission reduction target;
  - 3.3. Source of information and means of verification:
  - 3.4. Responsible institution for conducting regular updates and reporting.
- 4. Line ministries, organizations, legal entities and other stakeholders responsible for the implementation of policies and measures associated with specific indicator shall by 31 July each year provide to the Ministry most recent information for each selected indicator.
- 5.Based on the information received pursuant to this Administrative Instruction the Ministry shall prepare by 15 March 2027 and every year thereafter report on a progress towards meeting its national and international targets and inform the Government and the public.

6. In case the Ministry assess that the progress is not satisfactory it can propose to the Government to adopt corrective actions in IPCC sectors and categories where progress is not satisfactory.

# Article 21 Reporting on national adaptation actions

- 1. The Ministry shall report to the Government on information related to climate change adaptation planning by 15 March 2027 and annually thereafter. The report shall describe the actions implemented or planned to facilitate adaptation to climate change, including information on:
  - 1.1. The main goals, objectives and institutional framework for adaptation;
    - 1.2. Climate change projections, including weather extremes, climate-change impacts, assessment of climate vulnerability and risks and key climate hazards;
    - 1.3. Adaptive capacity;
    - 1.4. Adaptation plans and strategies;
    - 1.5. Monitoring and evaluation framework;
    - 1.6. Progress made in implementation, including good practices and changes to governance.
- 2. The information regarding the adaptation as referred in paragraph 1 of this Article shall be reported in a format as set out in Annex IV of this Administrative Instruction.
- 3. The Ministry shall make available to the public, in electronic form, the repos referred in paragraph 1 of this Article.

### Article 22 Annexes

- 1. Constituent parts of this Administrative Instruction are:
  - 1.1. Annex 1 IPCC sectors and categories of GHG emissions;
  - 1.2. Annex 2 Reporting on national policies and measures pursuant to Article 18 of this Administrative Instruction;
  - 1.3. Annex 3 Information on GHG projections pursuant to Article 19 of this Administrative Instruction;
  - 1.4. Annex 4 Information on national adaptation actions.

### CHAPTER V FINAL PROVISIONS

### Article 23 Transitional provisions

Article 14, paragraph 1 of this Administrative Instruction begins to apply twelve (12) months after the entry into force of this Administrative Instruction.

### Article 24 Abrogation

With the entry into force of this Administrative Instruction, Administrative Instruction (GRK) No. 01/2016, on Mechanism for Monitoring Greenhouse gas Emissions.

### Article 25 Entry into force

This Administrative Instruction enters into force seven (7) days after following its publication in the Official Gazette of the Republic of Kosovo.

Albin Kurti
Acting Prime Minister of the Republic of Kosovo
04.December.2025

#### **ANNEX I**

#### IPCC SECTORS AND CATEGORIES OF GHG EMISSIONS

### 1. Energy

- A. Fossil Fuel Combustion
  - 1. Energy industry
  - 2. Manufacturing industry and construction
  - 3. Transport
  - 4. Other sectors
  - 5. Other
- B. Fugitive emissions from fuels
  - 1. Solid fuels
  - 2. Oil and natural gas
- C. Carbon capture, transport and storage

### 2. Industrial processes and product use

- A. Mineral Industry
- B. Chemical industry
- C. Iron and steel industry
- D. Non energy products and solvent use
- E. Electronic industry
- F. Replacement for Ozone depleting substances
- G. Production and the use of other products
- H. Other

#### 3. Agriculture

- A. Enteric fermentation
- B. Manure management
- C. Rice Cultivation
- D. Agricultural soils
- E. Controlled savannah burning
- F. Burning of agriculture residuals
- G. Liming
- H. Urea application
- I. Other fertilizer containing carbon
- J. Other

#### 4. Land use Land use change and Forestry

- A. Forest land
- B. Agriculture land
- C. Pasture
- 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 waste burning
  D. Wastewater treatment and discharge
- E. Other

### **ANNEX II**

# REPORTING ON NATIONAL POLICIES AND MEASURES PURSUANT TO ARTICLE 18 OF THIS ADMINISTRATIVE INSTRUCTION

Table 1: Format for reporting on national system for policies and measures and projections

Reporting obligation	Fields for textual information	Examples of details that could be reported under this specific reporting obligation
Name and contact information for the entities with overall responsibility for the National Systems for policies and measures and projections		<ul> <li>List the responsible entity or entities, and their specific roles and responsibilities.</li> <li>Identify the lead entity.</li> </ul>
1 3		<ul> <li>If such a description has already been provided, report changes to the name and contact information.</li> </ul>
Institutional arrangements in place for preparation of reports on policies and measures and of projections as well as for reporting on them, including an organogram		<ul> <li>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 information, their responsibilities, and their interactions.</li> </ul>
		— Provide a description of the organogram to show the organisational structure of the National System for policies and measures and projections, including the functional and hierarchical inter-relationships between organisations.
		<ul> <li>If such a description of the national system has already been provided, report and explain changes to institutional arrangements.</li> </ul>
Legal arrangements in place for preparation of reports on policies and measures and of projections		<ul> <li>Are there any legal arrangements in place to ensure reporting is completed, and/or data provided? Report the legislation and its scope.</li> </ul>
		<ul> <li>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.</li> </ul>
Procedural and administrative arrangements and timescales in place for the preparation of reports		<ul> <li>Report the cycle for preparation of report on policies and measures and of projections.</li> </ul>
on policies and measures and of projections, to ensure the timeliness, transparency, accuracy, consistency, comparability and completeness of the information reported.		<ul> <li>Summarise the methodologies and mechanisms how timeliness, transparency, accuracy, consistency, comparability and completeness of the information reported are ensured.</li> </ul>
		<ul> <li>Report on assurance of consistency with preparation of reports on policies and measures, where relevant, and of projections for the reduction of national emissions of certain atmospheric pollutants</li> </ul>
		<ul> <li>Optionally, provide diagrams that show the processes involved in the national system. These diagrams could include the information flows through the system, and at which points QC and QA measures are applied.</li> </ul>
		<ul> <li>If such a description has already been provided, report the changes to procedural and administrative arrangements.</li> </ul>
Description of the information collection process		— Provide a summary of the process for collecting information for developing policies and measures, evaluating policies and measures and for developing projections. Explain if and how consistent processes are used for collecting and using information for policies and measures and projections.
		<ul> <li>If such a description has already been provided, report the changes to the data collection process.</li> </ul>
Description of the alignment with the national inventory system		<ul> <li>Provide information on the alignment with the national system for the GHG inventory, such as processes to ensure consistency of the data used.</li> </ul>
		— Option to provide details of links to other climate reporting systems if relevant.
		<ul> <li>If such a description has already been provided, report changes to the links to the national system for greenhouse gas inventories.</li> </ul>
Description of the links to arrangements 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 measures 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 reporting of policies and measures and projections	<ul> <li>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.</li> </ul>						
	<ul> <li>If such a description has already been provided, report the changes to the quality control and quality assurance activities.</li> </ul>						
Description of the process for selecting assumptions, methodologies and models for making projections of anthropogenic greenhouse gas emissions	<ul> <li>Describe the process behind the selection of assumptions, methodologies and models used. The Ministry may also report the reasons for their choices, or cross reference to other reports providing this information.</li> </ul>						
	<ul> <li>If such a description has already been provided, report the changes to these processes.</li> </ul>						
Description of procedures for the official consideration and approval of the Member States national system for policies and measures and	<ul> <li>Describe the process for officially approving the national system or changes to the national system.</li> </ul>						
projections	<ul> <li>If such a description has already been provided, report the char to this process.</li> </ul>						
Information on relevant institutional administrative and procedural arrangements for domestic implementation of the EU's nationally determined contribution, or changes to such arrangements	— Refer to the arrangements for implementing policies and measures as means of domestic implementation and to the arrangements for national projections of anthropogenic greenhouse gas emissions by sources and removals by sinks as means to track domestic progress.						
	<ul> <li>If such a description has already been provided, report the changes to such arrangements.</li> </ul>						
Description of the stakeholder engagement undertaken in relation to the preparation of policies and measures and projections	<ul> <li>Report a description of the stakeholder engagement undertaken in relation to the preparation of policies and measures and projections. Indicate which stakeholders were consulted, and any changes or improvements made.</li> </ul>						

#### Note:

The first report prepared pursuant to Article 19 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

Table 2: Sectors, gases and type of policy instrument

	PaM number
	Name of policy or measure
	Single or grouped policy or measure
	In case of a grouped policy or measure, which single policies or measures does it cover
	Geographical coverage (ª)
	Sector(s) affected (b)
	GHG(s) affected (c)
	Objective (4)
	Quantified objective (9)
	Short description
	Assessment of the contribution of the policy or Measure to the achievement of the long- term strategy
	Type of policy Instrument (f)
	Energy union Energy Union policies which
	resulted in the implementation of the PaM
	Status of implementation ( <sup>h</sup> )
	Start Implementation period

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

- (a) Institutions responsible for preparation and/or implementation of national policies shall select from the following categories: covering two or more countries, national, regional, local.
- (b) Institutions responsible for preparation and/or implementation of national policies 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) Institutions responsible for preparation and/or implementation of national policies shall select from the following GHGs (more than one GHG can be selected): carbon dioxide (CO<sub>2</sub>); methane (CH<sub>4</sub>); nitrous oxide (N<sub>2</sub>O); 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'. Institutions responsible for preparation and/or implementation of national policies 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.

Table 3: 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)

PaM number	Policy impacting		Ex-ante assessment																
	EI, LULUCF and/or ESR /emission	redu CC	ction O2-eq	uivalent year)	r t (kt	redu CO	ctior 2-equ y	ivalent p ear)	(kt	red C0	uctio D <sub>2</sub> -eq	emissio ns in t+ 1 uivalent year) LULUCF (°)	10 (kt	redi	uctio D <sub>2</sub> -eq	uivalent year)	15 (kt	Factors affected by the PaM	Documentation / Source of estimation if available (provide a weblink of the report where the figure i referenced from)

Abbreviations: EI = emissions from installations; ESR = total emissions without international aviation and bunker fuels minus emissions from installations minus emissions from land use land use change and forestry; LULUCF emissions from land use land use change and forestry.

- (a) Ministries and institutions 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) Ministries and institutions 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 EI 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 4: Available projected and realised costs and benefits of individual or groups of policies and measures on mitigation of climate change (a)

PaM		Projected cost	s and be	nefits									
numb er	Year(s)	Gross costs in	Absolu	Benefits(b	Absolu	Net costs	Absolu	Pric	Description	Documentati	Descripti	Year(s)	Gross costs in
CI	for	EUR per tonne	te	) in EUR	te	in EUR	te net	e	of cost	on	on of	for	EU per tonne
	which	CO <sub>2</sub> - equivalent	gross	per	benefit	per	cost	yea	estimates	/ Source of	non-	which	CO <sub>2</sub> -
	cost has	reduced/sequeste	costs	tonne	(b) per	tonne	per	r	(basis for	cost	GHG	cost has	equivalent
	been	red	per	CO <sub>2</sub> -	year in	CO <sub>2</sub> -	year		cost	estimation	mitigatio	been	reduced/sequeste
	calculat		year in	equivalen	EUR	equivalen	in EUR		estimate,	(provide a	n	calculat	red
	ed		EUR	t		t			what type	weblink of	benefits	ed	
				reduced/		reduced/			of costs	the report			
				sequester		sequester			are	where the			
				ed		ed			included in	figure is			
									the	referenced			
									estimate,	from)			
									methodolo				
									gy) (°)				

- (a) The Ministry 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.
- (°) 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

Table 5: Reporting on indicators pursuant to Article 18

No	Nomenclature in Eurostat energy efficiency indicators	Indicator	Numerator / denominator (1) (4)	Guidance / definitions (²)	Year X-2
1	TRANSFORMATION B0	Specific CO <sub>2</sub> emissions of public and auto- producer power plants, t/TJ	CO <sub>2</sub> emissions from public and auto- producer thermal power stations, kt	CO <sub>2</sub> emissions from all fossil fuel combustion for gross electricity and heat production by public and auto-producer thermal power and combined heat and power plants. Emissions from heat only plants are not included.	
			All products — output by public and auto- producer thermal power stations, PJ	(combined heat and power plants - CHP) by public and auto- producer thermal power and  combined 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 consumption	
				of electricity in the plant auxiliaries and in transformers is included. (source: energy balance)	
2	TRANSFORMATION E0	Specific CO <sub>2</sub> emissions of auto-producer plants, t/TJ	CO <sub>2</sub> emissions from auto- producers, kt	CO <sub>2</sub> emissions from all fossil fuel combustion for gross electricity and heat production by auto-producer thermal power and combined heat and power plants.	
			All products output by auto- producer thermal power stations, PJ	Gross electricity produced and any heat sold to third parties (combined heat and power - CHP) by auto-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 consumption of electricity in the plant auxiliaries and in transformers is included (source: energy balance).	
3	INDUSTRY A1.1	Total CO <sub>2</sub> intensity - iron and steel industry, t/million euro	Total CO <sub>2</sub> emissions from iron and steel, kt	CO <sub>2</sub> emissions from combustion of fossil fuels in manufacture of iron and steel including combustion for the generation of electricity and heat (IPCC source category 1A2a), from the iron and steel production process (IPCC source category 2C1) and from ferroalloys production process (IPCC source category 2C2).	

			Gross value-added - iron and	Gross value added at constant
				2016 prices in manufacture of basic iron and steel and of ferroalloys (NACE 27.1), manufacture of tubes (NACE 27.2), other first processing of iron and steel (NACE (27.3), casting of iron (NACE 27.51) and casting of steel (NACE 27.52). (source: National Accounts)
4	INDUSTRY A1.2	Energy-related CO <sub>2</sub> intensity — chemical industry, t/million euro		CO <sub>2</sub> 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).
				Gross value added at constant 2016 prices in manufacture of chemicals and chemical products (NACE 24) (source: National Accounts)
5	INDUSTRY A1.3	Energy-related CO <sub>2</sub> intensity — glass, pottery and building materials industry, t/million euro	Energy-related CO <sub>2</sub> emissions glass, pottery and building materials, kt	CO <sub>2</sub> 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 buildings material industry, billion Euro	Gross value added at constant 2016 prices in manufacture of non-metallic mineral products (NACE 26) (source: National Accounts)
6	INDUSTRY A1.4	Energy-related CO <sub>2</sub> intensity — food, drink and tobacco industry, t/million euro	Energy-related CO <sub>2</sub> emissions from food, drink and tobacco industry, kt	CO <sub>2</sub> 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). Gross value added at constant
7	INDUSTRY A1.5	Energy-related CO <sub>2</sub> intensity — paper and printing industry, t/million euro		CO <sub>2</sub> 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)
			printing industry, billion Euro	Gross value added at constant 2016 prices in manufacture of pulp, paper and paper products (NACE 21) and publishing, printing and reproduction of recorded media (NACE 22) (source: National Accounts)
8	HOUSEHOLDS A0	Specific CO <sub>2</sub> emissions of households for space heating, kg/m <sup>2</sup>	CO <sub>2</sub> emissions of households for space heating, kt	CO <sub>2</sub> emissions from <b>fossil</b> fuel combustion for space heating in households.
				Total surface area of permanently occupied dwellings
9	SERVICES B0	Specific CO <sub>2</sub> emissions of commercial and institutional sector for space heating, kg/m <sup>2</sup>	CO <sub>2</sub> emissions from space heating in commercial and institutional, kt	CO <sub>2</sub> emissions from fossil fuel

			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)
10	*	CO <sub>2</sub> emissions of diesel-driven passenger cars, kt	CO <sub>2</sub> emissions from the combustion of diesel for all transport activity with passenger cars (IPCC source category 1A3bi only diesel)
		Number of kilometres of diesel- driven passenger cars, billion km	Number of vehicle kilometres of total diesel-driven passenger cars licensed to use roads open to public traffic. (source: transport statistics)
11	-	CO <sub>2</sub> emissions of petrol-driven passenger cars, kt	CO <sub>2</sub> emissions from the combustion of petrol for all transport activity with passenger cars (IPCC source category 1A3bi only petrol)
		Number of kilometres of petrol- driven passenger cars, billion 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

- (1) Ministries and other Institutions shall follow this guidance. If they cannot follow exactly this guidance or if numerator and denominator are not entirely consistent, Ministries and other Institutions shall clearly indicate this.
- (2) The references to IPCC source categories refer to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories.
- (3) One billion means one thousand millions.

# ANNEX III INFORMATION ON GHG PROJECTIONS PURSUANT TO ARTICLE 19 OF THIS ADMINISTRATIVE INSTRUCTION

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

Category (2)	Separatel SF <sub>6</sub> , N PFCs, HFCs and	CO <sub>2</sub> -e	EI e eq) (		sio	ns (k	at CO	)2-	ESR emissions (kt CO <sub>2</sub> -eq) ( <sup>5</sup> )															
			ear				Year						Year					Year						
	projectio n base vear ( <sup>6</sup> )	t- 5 ( <sup>7</sup> )	t	t+5	t+10	t+15	projectio n base year	t- 5	t	t+5	t+10	t+15	projectio n base year	t- 5	t	t+5	t+10	t+15	projection base year		t	t+5	t+1 0	t+15
Total excluding LULUCF																								
Total including LULUCF																								
1. Energy																								
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																								
a.Domestic aviation																								
b.Road transportation																								
c.Railways																								
d.Domestic navigation																								
e.Other transportation																								
4.Other sectors																								
a.Commercial/ Institutional																								
b.Residential																								
c.Agriculture/ Forestry/ Fishing																								
5.Other			H																					
B. Fugitive emissions from fuels																								
1.Solid fuels																								
2.Oil and Natural gas and other emissions from energy production																								

~ ~ ~											1			
C.CO <sub>2</sub> transport and storage														
2. Industrial														
processes A. Mineral		+							+					
Industry														
of which 2.A.1 (cement production)														
B. Chemical industry														
C. Metal industry														
of which 2.C.1 (Iron and steel														
production)														
D. Non-energy products from fuels														
E. Electronics industry														
F. Product uses as substitutes for ODS (8)														
G. Other product manufacture and use														
H.Other														
3. Agriculture														
A.Enteric fermentation														
B Manure management														
C. Rice cultivation														
D.Agricultural soils														
E. Prescribed burning														
F.Field burning of agricultural residues														
G.Liming														
H.Urea application														
I.Other carbon- containing fertilizers														
fertilizers  J. Other (please specify)														
4. Land Use, Land- Use Change and Forestry (LULUCF, reported emissions and removals) (9) A.Forest land														
B.Cropland		-			H	+								
C.Grassland		1	H		$  \cdot  $				T					
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 <sub>2</sub> emissions from biomass											
CO <sub>2</sub> captured											
Indirect CO <sub>2</sub> (if available) ( <sup>10</sup> )											

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 this AI 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 the Ministry 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 from installations.
- (5) Total emissions without international aviation and bunker fuels minus emissions from installations minus emissions from land use land use change and forestry
- (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: Projections of reported greenhouse gas emissions and removals in the LULUCF sector as reported in the national greenhouse gas inventory (to be reported on if Table 5a is not completed in full)  $^{(1)}$   $^{(2)}$ 

Part 1: LULUCF GI		l removals on invent	ory and accounting	separately		CO <sub>2</sub>		I <sub>4</sub> , N <sub>2</sub> (	O (kt	Total GHO	3 emi	ission	ıs (kı	CO <sub>2</sub> -	eq)
Greenhouse gas source and sink categories	Category as used in Table 1a	LULUCF Regulation Accounting subcategory (as Table 5a)	LULUCF Regulation Accounting category	projection base year (³)	t-5	t	t+5	t+10	t+15	projection base year	t-5	t	t+5	t+10	t+15
4.A.1. Forest land remaining forest land	4.A Forest land	Forest land remaining forest land	Managed forest land												
4.A.2.1 Cropland Converted to forest land	4.A Forest land	Cropland converted to forest land	Afforested land												
4.A.2.2 Grassland converted to forest land	4.A Forest land	Grassland converted to forest land	Afforested land												
4.A.2.3 Wetlands Converted to forest land	4.A Forest land	Wetland converted to forest land	Afforested land												
4.A.2.4 Settlements Converted to forest land	4.A Forest land	Settlements converted to forest land	Afforested land												
4.A.2.5 Other land Converted to forest land	4.A Forest land	Other land converted to forest land	Afforested land												
4.B.1. Cropland remaining cropland	4.B. Cropland	Cropland remaining cropland	Managed cropland												
4.B.2.1 Forest land Converted to cropland	4.B. Cropland	Forest land converted to cropland	Deforested land												
4.B.2.2 Grassland Converted to cropland	4.B. Cropland	Grassland converted to cropland	Managed cropland												
4.B.2.3 Wetlands converted to cropland	4.B. Cropland	Wetland converted to cropland	Managed cropland												
4.B.2.4 Settlements converted to cropland	4.B. Cropland	Settlements converted to cropland	Managed cropland												
4.B.2.5 Other land converted to cropland	4.B. Cropland	Other land converted to cropland	Managed cropland												
4.C.1. Grassland remaining grassland	4.C. Grassland	Grassland remaining grassland	Managed grassland												
4.C.2.1 Forest land converted to grassland	4.C. Grassland	Forest land converted to grassland	Deforested land												
4.C.2.2 Cropland converted to grassland	4.C. Grassland	Cropland converted to grassland	Managed grassland												
4.C.2.3 Wetlands converted to grassland	4.C. Grassland	Wetland converted to grassland	Managed grassland												
4.C.2.4 Settlements converted to grassland	4.C. Grassland	Settlements converted to grassland	Managed grassland												

		04111	M111						
	4.C. Grassland	Other land converted to	Managed grassland						
Converted to grassland		grassland							
4.D.1. Wetlands remaining wetlands	4.D. Wetlands	Wetland remaining wetland	Managed wetland						
4.D.2.1.1 Forest land converted to peat extraction	4.D. Wetlands	Forest land converted to wetland	Deforested land						
4.D.2.1.2 Cropland converted to peat extraction	4.D. Wetlands	Cropland converted to wetland	Managed cropland						
4.D.2.1.3Grassland converted to peat extraction	4.D. Wetlands	Grassland converted to wetland	Managed grassland						
4.D.2.1.4 Settlements converted to peat extraction	4.D. Wetlands	Settlement converted to wetland	Managed wetland						
4.D.2.1.5 Other land converted to peat extraction	4.D. Wetlands	Other land converted to wetland	Managed wetland						
4.D.2.2.1 Forest land converted to flooded land	4.D. Wetlands	Forest land converted to wetland	Deforested land						
4.D.2.2.2 Cropland converted to flooded land	4.D. Wetlands	Cropland converted to wetland	Managed cropland						
4.D.2.2.3Grassland converted to flooded land	4.D. Wetlands	Grassland converted to wetland	Managed grassland						
4.D.2.2.4 Settlements converted to flooded land	4.D. Wetlands	Settlement converted to wetland	Managed wetland						
4.D.2.2.5 Other land converted to flooded land	4.D. Wetlands	Other land converted to wetland	Managed wetland						
4.D.2.3.1 Forest land converted to other wetlands	4.D. Wetlands	Forest land converted to wetland	Deforested land						
4.D.2.3.2 Cropland converted to other wetlands	4.D. Wetlands	Cropland converted to wetland	Managed cropland						
4.D.2.3.3 Grassland converted to other wetlands		Grassland converted to wetland	Managed grassland						
Settlements converted to other	4.D. Wetlands	Settlement converted to wetland	Managed wetland						
wetlands  4.D.2.3.5 Other land converted to other wetlands	4.D Wetlands	Other land converted to wetland	Managed wetland						
	4.E Settlements	not accounted for und 2018/841	der Regulation (EU)						
4.E.2.1 Forest land converted to settlements	4.E Settlements	Forest land converted to settlements	Deforested land						

			Т	1						
4.E.2.2 Cropland converted to settlements	4.E Settlements	Cropland converted to settlements	Managed cropland							
4.E.2.3 Grassland converted to settlements	4.E Settlements	Grassland converted to settlement	Managed grassland							
4.E.2.4 Wetlands converted to settlements	4.E Settlements	Wetland converted to settlement	Managed wetland							
4.E.2.5 Other land converted to settlements	4.E Settlements	not accounted for und 2018/841	der Regulation (EU)							
4.F.1. Other land remaining other land	4.F. Other land	not accounted for und 2018/841	der Regulation (EU)							
4.F.2.1 Forest land converted to other land	4.F. Other land	Forest land converted to other land	Deforested land							
4.F.2.2 Cropland converted to other land	4.F. Other land	Cropland converted to other land	Managed cropland							
4.F.2.3 Grassland converted to other land	4.F. Other land	Grassland converted to other land	Managed grassland							
4.F.2.4 Wetlands converted to other land	4.F. Other land	Wetland converted to other land	Managed wetland							
4.F.2.5 Settlements converted to other land	4.F. Other land	not accounted for und 2018/841	der Regulation (EU)							
4.G Harvested wood products; thereof: Harvested wood products from managed forest land	4.G. Harvested wood products	Harvested wood products from managed forest land	Harvested wood products							
4.G Harvested wood products; thereof: Harvested wood Products from afforested land	wood products	Harvested wood products from afforested land	Harvested wood products							
4.G Harvested wood products; thereof: Harvested Wood products from deforested land	wood products	not accounted for und 2018/841	der Regulation (EU)							
4.G Harvested wood products; thereof: Harvested wood products from other land	4.G. Harvested wood products	not accounted for und 2018/841	der Regulation (EU)							
4.H. Other (please specify)	4.H. Other	not accounted for und 2018/841	der Regulation (EU)							

Table 1b Part 2: summary for Table 1a	separate	ly for Co	O <sub>2</sub> , CH	, N <sub>2</sub> O (	kt CO <sub>2</sub> -	eq)	7	Total Gl	HG emi	ssions (	kt CO <sub>2</sub> -	eq)
Greenhouse gas source and sink categories (as Table 1a)	projection base year	t-5	t	t+5	t+10	t+15	projection base year	t-5	t	t+5	t+10	t+15
4.A. Forest land												
4.B. Cropland												
4.C. Grassland												
4.D. Wetlands												
4.E. Settlements												
4.F. Other land												
4.G. Harvested wood products												
4.H. Other												

Table 1b	Part 3	3: sum	mary for Table 5a	CO <sub>2</sub> ,	-	rately N <sub>2</sub> O (l		-eq)		Total G	HG en	nission	s (kt C	O <sub>2</sub> -eq)	
			LULUCF Regulation Accounting category	projection base year	t-5	t	t+5	t+10	t+15	projection base year	t-5	t	t+5	t+10	t+15
			Sum afforested land												
			Sum deforested land												
			Sum managed cropland												
			Sum managed grassland												
			Sum managed forest land												
			Sum managed wetland												
			Sum harvested wood products												
			Sum unaccounted												

#### Notes:

- (1) A reporting up to t-10 on yearly basis is optional.
- (2) Emissions shall be expressed as positive values; removals shall be expressed as negative values.
- (3) Values for t-5 shall only be provided when t-5 is after the projection base year

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

Indicator (1)/				Indicator	•	With e	existin	g mea	sures			h addi neasu		l
numerator/denominator	Unit	Guidance/definition	Guidance/source	(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		EUR (2016); Carbon intensity to be calculated with GDP as defined by Eurostat												
GHG intensity of domestic power and heat generation		MWh of gross electricity and heat generation as defined by Eurostat												
GHG intensity of final energy consumption by sector														
Industry	tCO2eq/toe													
Residential	tCO2eq/toe													
Tertiary	tCO2eq/toe													
Transport	tCO2eq/toe													
Passenger transport (when available)	tCO2eq/toe													
Freight transport (when available)	tCO <sub>2</sub> eq/toe													
Add a line for each other indicator														

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

Table 3: Reporting on parameters / variables for projections, if used  $^{(1)}$   $^{(2)}$ 

	er used (3) ('with existing		Year			•	Values							Sector	al projectio		ch the
m	easures' scenario)	Parameter / variable part of projections (6)	Base=Reference year	Base=Reference year	t- 5		t+ 5	t+ 10	t+ 15	Default unit	Data source	Year of publication of data source	Year of publication of data source	1 A:1 Energy industries	1:A:2 Manufacturing industries and construction	1:A:3 Transport excluding 1:A:3:a domestic aviation	Comments for guidance
1.General variables	parameters and																
Population										Count							
Gross	Real growth rate									%							
domestic product (GDP)	Constant prices									EUR million							
Gross value	added (GVA)- total									EUR million							
Gross value	added (GVA) - agriculture									EUR million							
Gross value	added (GVA)- construction									EUR million							
Gross value	added (GVA) - services									EUR million							
Gross value sector	added (GVA) – energy									EUR million							
Gross value	added (GVA) – industry									EUR million							
Number of 1	households									Thousands							
Household s	ize									inhabitants/ household							
Disposable i	ncome of households									EUR / year							
Number of p modes)	assenger- kilometres ( <u>all</u>									million pkm							
Number of p	assenger- kilometres - road									million pkm							
Of which put	blic road transport									million pkm							
Of which pri	vate cars									million pkm							
Of which mo	torcycles									million pkm							
Of which bu.	ses									million pkm							
Number of p	assenger- kilometres - rail									million tkm							
Number of domestic av	passenger- kilometres – iation									million tkm							
Number of p international	assenger- kilometres – aviation									million tkm							
Number of domestic na	passenger- kilometres – vigation									million tkm							
Freight trans (all modes)	port tonnes-kilo metres									million tkm							
Freight trans road	port tonnes-kilometres -									million tkm							
Freight trans	port tonnes-kilometres -									million tkm							
Freight trans domestic avi	port tonnes-kilometres – ation									million tkm							
Freight transpinternational	port tonnes-kilometres – aviation									million tkm							
Freight transp domestic nav	port tonnes-kilometres – igation (inland waterways									million tkm							
and national	,									nul project							
	Coal									Either EUR/GJ							

fuel import	Crude Oil					On ELID /too						
fuel import	Cendo, Oil					Or EUR/toe						1
	Clude Oil					Either EUR/GJ						
prices						Or EUR/toe						
· 	Natural gas					Either EUR/GJ						
						Or EUR/toe						
EU ETS carb	•					EUR/EUA						
Exchange rate	es EURO (for non- ries), if applicable					EUR/ currency						
						TIGD/						
Exchange rate applicable	es US DOLLAR, if					USD/ currency						
**	eating degree days (HDD)					Count						
	poling degree days (CDD)					Count						
	palances and indicators					Count	ı		<u> </u>	1		
2.1 Energy												
Indigenous P	Production by fuel type					ktoe						
(total)												
Solids						ktoe						
Oil						ktoe						
Natural gas						ktoe						
Nuclear						ktoe						
Renewable er	nergy sources					ktoe						
Waste and oth	her					ktoe						
Net imports 1	Electricity					ktoe						
Gross inland	consumption by fuel type					ktoe						
source (total)												
Solid fossil fu	uels					ktoe						
Crude oil and	l petroleum products					ktoe						
Natural gas						ktoe						
Nuclear energ	gy					ktoe						
Electricity						ktoe						
Derived heat						ktoe						
Renewables						ktoe						
Waste						ktoe						
Other						ktoe						
	city and heat						-		1	1	1	
Gross electric	city generation (total)					GWh						
Nuclear energ	gy					GWh						
Solids						GWh						
Oil (incl. refin						GWh						
Natural gas (	including derived gases)					GWh						
Renewables						GWh						
	hydrogen, methanol)					GWh						
Heat generation	on from thermal power					GWh						
	on from combined heat and including industrial waste					GWh						
heat												
	rmation sector								1	1	ı	
Fuel inputs to	thermal power generation					ktoe			ļ			ļ
Solids						ktoe			ļ			ļ
Oil						ktoe					1	
Gas						ktoe					1	
	other conversion processes consumption					ktoe						
Final energy	consumption					ktoe						
Solids						ktoe						
Oil						ktoe						
						ktoe						
Uas -						ktoe				1		
Gas Electricity									i .			i .
Electricity						ktoe						
	nergy					ktoe ktoe						

			 _						1	1	1	
Other						ktoe						
Industry						ktoe						
Solids						ktoe						
Oil						ktoe						
Gas						ktoe						
Electricity						ktoe						
Heat						ktoe						
Renewable energy						ktoe						
Other						ktoe						
Residential						ktoe						
Solids						ktoe						
Oil						ktoe						
Gas						ktoe						-
Electricity						ktoe			1			
Heat						ktoe						-
Renewable energy			-			ktoe						
Other						ktoe						
Tertiary						ktoe						
Solids						ktoe						
Oil						ktoe						
Gas						ktoe						
Electricity						ktoe						
Heat			L			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 transport (when available)						ktoe						
thereof freight transport (when available)						ktoe						
thereof international aviation												
Other						ktoe						
Final non-energy consumption						ktoe						Щ
2.5 Prices												
Electricity prices by type of using sector			1	1	1		1	1	1			
Residential						EUR(MWh)						
Industry						EUR(MWh)						
Tertiary						EUR(MWh)						
National retail fuel prices (including												
taxes, per source and sector)										ı		
Coal, industry						EUR/ktoe						
Coal, house holds						EUR/ktoe						
Diesel oil, industry						EUR/ktoe						
Diesel oil, households			L			EUR/ktoe	L					
Diesel oil, transport						EUR/ktoe						
Diesel oil, transport private (when						EUR/ktoe						
available)	L		L				L				<u> </u>	
Diesel oil, transport public (when available)						EUR/ktoe						
Gasoline, transport						EUR/ktoe						
Gasoline, transport private (when available)						EUR/ktoe						
Gasoline, transport public (when available)						EUR/ktoe						
Natural gas, industry						EUR/ktoe						$\vdash$
	<b> </b>	<b> </b>							1			
Natural gas, households	l	l		l .		EUR/ktoe			1		1	

3. Non-CO <sub>2</sub> emission related													
parameters													
<sub>3.1</sub> Agriculture													
Livestock				 								,	
Dairy cattle	$\vdash$					1 000 heads							
Non-dairy cattle	<b></b>		_			1 000 heads							
Sheep	$\vdash$		-		-	1 000 heads							
Pig	$\vdash$	_	-		+ +	1 000 heads				-			
Poultry	$\vdash$	-				1 000 heads							
Nitrogen input from application of synthetic fertilizers						kt nitrogen							
Nitrogen input from application of manure						kt nitrogen							
Nitrogen fixed by N- fixing crops						kt nitrogen							
Nitrogen in crop residues returned to soils						kt nitrogen							
Area of cultivated organic soils						1 000 hectares							
3.2 Waste	$\vdash\vdash\vdash$	1	1		1 1			1	<u> </u>			1	<u> </u>
Municipal solid waste (MSW) generation	$\vdash\vdash$	-	+	-	+	t	$\vdash$						
Municipal solid waste (MSW) going to landfills						t							
Share of CH <sub>4</sub> recovery in total CH <sub>4</sub> generation from landfills						%							
4. LULUCF	$\vdash$											1	<del>                                     </del>
4.1 Managed forest land													
Forest harvest removals for energy use						1 000 cubic meters							
Forest harvest removals for non-energy use						1 000 cubic meters							
Forest increment						1 000 cubic meters							
Forest disturbances included in modelling						Yes / No							
Forest land remaining forest land						1 000 hectares							
4.2 Afforested land				 	1			1	-			1	<u> </u>
Forest harvest removals for energy use						1 000 cubic meters							
Forest harvest removals for <u>non-</u> <u>ene</u> rgy use						1 000 cubic meters							
Forest increment						1 000 cubic meters							
Cropland converted to forest land						1 000 hectares							
Grassland converted to forest land						1 000 hectares							
Wetlands converted to forest land						1 000 hectares							
Settlements converted to forest land						1 000 hectares							
Other land converted to forest land						1 000 hectares							
4.3 Deforested land	$\vdash$					1 000 1							
Forest land converted to cropland	$\vdash\vdash$	-	1	+	+ +	1 000 hectares	$\vdash$			-		1	
Forest land converted to grassland Forest land converted to wetlands	$\vdash$	-	+			1 000 hectares	H					<del> </del>	
Forest land converted to wetlands  Forest land converted to settlements			1			1 000 nectares						<u> </u>	
1 orest faile converted to settlements						hectares							
Forest land converted to other land						1 000 hectares							
4.4 Managed cropland											-	1	
Cropland, remaining cropland	$\vdash \vdash$	_	1		$\perp$	1 000 hectares						ļ	
Grassland, wetland, settlement or other land converted to cropland						1 000 hectares							
Cropland converted to wetland,	T					1 000 hectares							
settlement or other land (excl. forest land)													
4.5 Managed grassland				 									
Grassland remaining grassland						1 000 hectares	oxdot						
Cropland, wetland, settlement or other						1 000 hectares	[						
land, converted to grassland													

		-				_				1
Grassland converted to wetland,					1 000 hectares					
settlement or other land										
4.6 Managed wetland		•				•	•	•	•	
Wetland remaining wetland					1 000 hectares					
Settlement or other land, converted to wetland					1 000 hectares					
Wetland converted to settlement or other land					1 000 hectares					
4.7 Harvested wood products		•	•			•	•	•	•	
Gains of Harvested wood products (4)					kt C					
Losses of Harvested wood products (4)					kt C					
Half-life of Harvested wood products (5)					years					
5. Other parameters and variables					•					
Technology cost assumptions used for main relevant technologies:										
Add row for each relevant technology										
Add row for each other relevant parameter										

- (1) Please add a row specific parameter used in the projections at the end of the Table. Note that this includes the term 'variables' because some of the parameters listed can be variables for certain projection tools used, depending on the models used.
- (2) Only those parameters / variables need to be reported that are part of the projections, either input or output.
- (3) Use of notation keys: the notation keys of IE (included elsewhere), NO (not occurring), C (confidential), NA (not applicable), and NE (Not estimated/Not used) may be used, as appropriate. The use of the notation key NE (Not estimated) is for cases where the suggested parameter is neither used as a driver nor reported along with the Ministry's Projections. Notation: t signifies the first future year ending with 0 or 5 immediately following the reporting year.
- (4) May include harvested wood products from managed forest land and afforested land.
- (5) Please specify the types of harvested wood products in the rows below (under 'Add row for each other relevant parameter').
- (6) To be filled with Yes/No.
- (7) Please specify additional different values for parameters used in different sector models
- (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 at least for oil, gas, and coal import prices as well as for carbon prices under the European Emission Trading System which the Commission has recommended 12 months before the deadline for submission of the reports

Table 4: Model Factsheet

Model name (abbreviation)	
Full model name	
Model version and status	
Latest date of revision	
URL to model description	
Model type	
Summary	
Intended field of application	
Description of main input data categories and data sources	
Validation and evaluation	
Output quantities	
GHG covered	
Sectoral coverage	
Geographical coverage	
Temporal coverage (e.g. time steps, time span)	
Other models which interact with this model, and type of interaction (e.g. data input to this model, use of data output from this model)	
Input from other models	
References to the assessment and the technical reports that underpin the projections and the models used	
Model structure (if diagram please add to the template)	
Comments or other relevant information	
	·

Notes.

The Ministry may reproduce this Table to report details of individual models or sub-models which have been used to create GHG projections.

Table 5a: Projections of reported emissions and removals from the LULUCF sector by gases and accounting categories (to be reported only if Table 1b is not completed in full)

Category		CO <sub>2</sub> (kt)						СН	4(kt)	)		N <sub>2</sub> O(kt)					Total GHG emissions (kt CO <sub>2</sub> -eq)							
	projection base year	t-5 (²)	t	t+5	t+10	t+15	projection base year	t-5	t	t+5	t+10	t+15	projection base year	t-5	t	t+5	t+10	t+15	projection base year	1-5	t	t+5	t+10	t+15
Managed forest land																								
Forest land remaining forest land																								
Afforested land																								
Cropland converted to forest land																								
Grassland converted to forest land																								
Wetland converted to forest land																								
Settlements converted to forest land																								
Other land converted to forest land																								
Deforested land																								
Forest land converted to cropland																								
Forest land converted to grassland																								
Forest land converted to wetland																								
Forest land converted to settlements																								
Forest land converted to other land																								
Managed cropland																								
Cropland remaining cropland																								
Grassland converted to cropland																								
Wetland converted to cropland																								
Settlements converted to cropland																								
Other land converted to cropland																								
Cropland converted to wetland																								
Cropland converted to settlements																								
Cropland converted to other land																								
Managed grassland																								
Grassland remaining grassland																								
Cropland converted to grassland																								
Wetland converted to grassland																								
Settlements converted to grassland																								
Other land converted to grassland																								
Grassland converted to wetland																								
Grassland converted to settlement																								
Grassland converted to other land																								
Managed wetland																								
Wetland remaining wetland																								
Settlement converted to wetland																								
Other land converted to wetland																								
Wetland converted to settlement																								
Wetland converted to other land																								
Harvested wood products																								
Managed forest land																								
Afforested land																								
Notes:																				·		·	·	

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

Table 5b: Projections of accounted emissions and removals from the LULUCF sector and the ESR sector (1)(2)

Category	2031-2035	2036-2040
	Total cumulative emissions/removals (kt CO <sub>2</sub> -eq)	Total cumulative emissions/removals (kt CO <sub>2</sub> -eq)
ESR (3)		
LULUCF: Afforested land		
LULUCF: Deforested land		
LULUCF: Managed cropland		
LULUCF: Managed grassland		
LULUCF: Managed forest land, including harvested wood products (4)		
LULUCF Managed Forest land, including harvested wood products assuming instantaneous oxidation		
LULUCF: Managed wetland (5)		

- (1) The accounting categories for LULUCF.
- (2) Accounted LULUCF emissions for Managed Forest Land are reported emissions/removals in comparison to a reference level. Reporting such accounted values is only mandatory when applying to Forest reference levels as calculated set out for Kosovo, for the given time-span (2031-2035, 2036-2040).
- (3) Emissions within the scope of ESR (total emissions without international aviation and bunker fuels minus emissions from installations minus emissions from land use land use change and forestry)
- (4) Accounting of this category for the 2036-2040 commitment period will be possible only with availability of final Forest Reference Levels.
- (5) Accounting of this category is mandatory starting from 2030. The Ministry not intending to select this category for accounting in the 2031-2035 period shall use the notation key 'not selected' for that period.

Table 6: Results of the sensitivity analysis (to be submitted for each sensitivity scenario calculated)

Category	GHG emissions/removals (kt CO <sub>2</sub> -eq)								
	projection base year	t-5	t	t+5	t+10	t+15			
Total excluding LULUCF									
Total emissions from Installations									
Total ESR									
LULUCF (reported)									
Add rows for other relevant sectors/categories if available									

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 val			Year		Default unit						
sensitivity scer	nario	Parameter varied (1)	Base=Reference year	Base=Reference year	t- 5	t	t + 5	t + 10	t + 15	uint	Comment for Guidance
General paramete variables	ers and										
Population										Count	
Gross domestic product (GDP)	Real growth rate									%	
	Constant prices									EUR million	EUR (2016) ( <sup>2</sup> )
Gross value added total	(GVA) –									EUR million	EUR (2016)
Gross value added agriculture	` ′									EUR million	EUR (2016)
Gross value added construction										EUR million	EUR (2016)
Gross value added services	, ,									EUR million	EUR (2016)
Gross value added (GVA) – energy sector										EUR million	EUR (2016)
Gross value added industry	` ′									EUR million	EUR (2016)
International (wholesale) fuel	Coal										EUR (2016) EUR (2016)
import prices	Crude										EUR (2016)
	Oil										EUR (2016)
	Natural gas									EUR/GJ	EUR (2016)
	gas									EUR/toe	EUR (2016)
EU ETS carbon pri	ice									EUR/ EUA	EUR (2016)
Number of heating days (HDD)	degree									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 furth parameters that we											

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

<sup>(1)</sup> Indicate with Yes / No.

<sup>(2)</sup> 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 for at least for oil, gas, and coal import prices as well as for carbon prices under the European Emission Trading System- which the Commission has recommended, 12 months before the deadline for submission of the reports.

#### **ANNEX IV**

# INFORMATION ON NATIONAL ADAPTATION ACTIONS PURSUANT TO ARTICLE 21 OF THIS ADMINISTRATIVE INSTRUCTION

#### 1.National circumstances, impacts, vulnerabilities, risks and adaptive capacity<sup>1</sup>

- 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.

Table 1 - Classification of climate-related hazards 5

	Temperature-related	Wind-related	Water-related	Solid mass-related
Chronic	Changing temperature (air, freshwater, marine water)	Changing wind patterns	Changing precipitation patterns and types (rain, hail, snow/ice)	Coastal erosion
			Precipitation and/or hydrological variability	Soil degradation (including desertification)
	Temperature variability		Ocean acidification	Soil erosion
	Permafrost thawing		Saline intrusion	Solifluction
			Sea level rise	
			Change in sea ice cover	
			Water scarcity	
Acute	Heat wave	Cyclone	Drought	Avalanche
	Cold wave/frost	Storm (including blizzards, dust and sandstorms)	Heavy precipitation (rain, hail, snow/ice)	Landslide
	Wildfire	Tomado	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 appropriate<sup>6</sup>:
  - 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;

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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"

<sup>&</sup>lt;sup>2</sup> The list is not exhaustive

<sup>&</sup>lt;sup>3</sup> The Ministry 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]

The Ministry 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].

<sup>&</sup>lt;sup>5</sup> Where relevant, the Ministry 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

<sup>&</sup>lt;sup>6</sup> 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.

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) <sup>7</sup>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 versa<sup>9</sup>.
- 2.3 Overview of institutional arrangements and governance at the sub-national 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.

#### 3.Adaptation strategies, policies, plans and goals

- 3.1 Adaptation priorities
- 3.2 Challenges, gaps and barriers to adaptation (11)11
- 3.3 Summaries of national strategies, policies, plans and efforts, with a focus on goals and objectives, foreseen actions  $^{12}$ , budget and timeline  $^{13}$
- 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 subnational levels to engage with:
  - a) stakeholders particularly vulnerable to climate change impacts;
  - b) the private sector<sup>14</sup>.

#### 4.Monitoring and evaluation of adaptation actions and processes

- 4.1 Monitoring and evaluation methodology <sup>15</sup> 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:

<sup>&</sup>lt;sup>7</sup> The Ministry shall report the title, year of adoption and status [superseded / adopted / completed and submitted for adoption / being developed] of each National adaptation Strategy and National Adaptation Plan

<sup>&</sup>lt;sup>8</sup> Aspects to consider include decision making, planning and coordination related to adaptation strategies, policies, plans and goals, addressing crosscutting issues, adjusting adaptation priorities and activities, implementing adaptation actions, including facilitating action to avert, minimise and address the adverse effect of climate change.

<sup>&</sup>lt;sup>9</sup> Including risk assessments at national or appropriate sub-national level, refining Kosovo disaster risk management planning at national or appropriate sub-national level, assessment of their risk management capability at national or appropriate sub-national and participation, on a voluntary basis, in peer reviews on the assessment of risk management capability.

<sup>&</sup>lt;sup>10</sup> Throughout the Annex, 'sub-national' refers to local and regional.

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

<sup>12</sup> Including nature-based solutions and actions leading to mitigation co-benefits and other relevant co-benefits

<sup>&</sup>lt;sup>13</sup> 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.

<sup>&</sup>lt;sup>14</sup> The Ministry 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.

<sup>&</sup>lt;sup>15</sup> The Ministry shall report on approaches, systems used, transparency and indicators.

- a) spending earmarked for climate adaptation including in disaster risk management;
- b) to the extent possible, the share of spending used to support climate adaptation <sup>16</sup> in each sector <sup>17</sup>.
- 4.3 Evaluating progress towards the following<sup>18</sup>:
  - 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;
  - 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 level<sup>19</sup>
- 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 other countries, international cooperation, and with regional and international organisations<sup>20</sup>:
  - 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.

 $<sup>^{16}</sup>$  The additional investment that makes a project (that would have been realised anyway) climate resilient.

<sup>&</sup>lt;sup>17</sup> The Ministry 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].

 $<sup>^{\</sup>rm 18}$  Based on the monitoring and evaluation methodology as reported under point 4.1.

<sup>&</sup>lt;sup>19</sup> The Ministry 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.

 $<sup>^{\</sup>rm 20}$  Excluding information on support to developing countries if applicable.