National system for policies and measures and projections of Cyprus

Name and contact information for the entities with overall responsibility for the National System for policies and measures and projections

Lead entity:

The Department of Environment of the Ministry of the Agriculture, Rural Development and Environment is designated as the national entity with the overall responsibility for the climate change policy evaluation and reporting on PaMs and projections of the anthropogenic GHG emissions. The Department of Environment holds the functional competence for activities related to the development and implementation of the national PaMs in the climate change prevention. Apart from its active role in the whole process, the Department of Environment is also involved in QA/QC activities regarding submission of the National GHG Inventory for each year and for preparation of projections of the anthropogenic GHG emissions. (contact details: Dr. Theodoulos Mesimeris, Chief Environment Officer, (+357) 22 408948, tmesimeris@environment.moa.gov.cy; Dr. Nicoletta Kythreotou, Environment Officer A', (+357) 22 408947, nkythreotou@environment.moa.gov.cy).

Other entities:

- Energy Service, Ministry of Energy, Commerce and Industry (fuels, RES, Energy efficiency,)
- Department of Public Works, Ministry of Transport, Communication and Works (sustainable mobility)
- Department of Electromechanical Services, Ministry of Transport, Communication and Works (electromobility infrastructure)
- Department of Agriculture, Ministry of Agriculture, Rural Development and Environment
- · Department of Forests, Ministry of Agriculture, Rural Development and Environment
- Department of Environment, Ministry of Agriculture, Rural Development and Environment (solid waste management, animal waste management)
- Local authorities

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

For the purposes of implementing the Regulation on the Governance of the Energy Union and Climate Action [(EU) 2018/1999] and in particular to set out the necessary foundation for a reliable, inclusive, cost-efficient, transparent and predictable Governance that ensures the achievement of the 2030 and long-term objectives and targets of the Energy Union in line with the 2015 Paris Agreement on climate change following the 21st Conference of the Parties to the United Nations Framework Convention on Climate Change (the "Paris Agreement"), through complementary, coherent, and ambitious efforts by the Union and its Member States, while limiting administrative complexity, a new structure for climate and energy governance has been approved by the Council of Ministers (15/11/2017 decision no. 83.709).

The core of this structure (see Figure 1), the "National Governance System for Climate and Energy" is a Ministerial Committee, consisting of the Minister of Agriculture, Rural Development and Environment, the Minister of Energy, Commerce and Industry, the Minister of Finance and the Minister of Transport, Communications and Works. The Ministerial Committee is co-chaired by the Minister of Agriculture, Rural Development and Environment and the Minister of Energy, Commerce and Industry. This committee has to propose the National Energy and Climate Plan (NECP) to the Council of Ministers which takes the final decision. The proposal of the NECP is prepared by the Technical Committee, which consists of the Permanent Secretaries of the same Ministries. The Technical Committee also monitors the implementation of the NECP and makes proposals for its revisions when necessary. The Technical Committee is co-chaired by the Permanent Secretary of the Ministry of Agriculture, Rural Development and Environment and the Permanent Secretary of the Ministry of Energy, Commerce and Industry. The Technical Committee is consulted by the following seven Expert Working Groups: Decarbonisation, Energy Efficiency, Energy Security, Internal Energy Market, Research, Innovation and Competitiveness, Renewable Energy and Transport. Transport is an additional working group created due to the significant contribution of the sector to the national emissions. Each Working Group has a coordinator. All working groups with the exception of decarbonisation are the responsibility of the Ministry of Energy, Commerce and Industry; decarbonisation is the responsibility of the Department of Environment (Ministry of Agriculture, Rural Development and Environment). The secretariat of the National Governance System for Climate and Energy is held by the Department of Environment.

This structure evolved after the publication of the Green Deal, to the National Governance System for Development Strategy in relation to the European Green Deal, with a Council of Ministers' Decision (13/11/2020, no. 90.370). The new governance system incorporated in its structure in addition to the climate and energy issues, all the institutions involved in the implementation of the issues included in the green deal. The new structure is presented in Figure 2. All the working groups associated with climate and energy continue the same manner of operation as presented above.

Legal arrangements in place for preparation of reports on policies and measures and of projections

No legal arrangements in place for preparation of reports on policies and measures and of projections other than the Council of Ministers Decision no. 83.709 of 15/11/2017.

Procedural and administrative arrangements and timescales in place for the preparation of reports on policies and measures and of projections, to ensure the timeliness, transparency, accuracy, consistency, comparability and completeness of the information reported

The Department of Environment of the Ministry of the Agriculture, Rural Development and Environment is responsible for ensuring the timeliness of the Reporting. No later than six months before the deadline of the Reporting, a kick-off meeting between the decarbonisation working group members is organized to launch the work. A date is set by which the decarbonisation working group members provide a list of their respective policies and measures to be included in the Reporting, along with a distinction between the WEM and WAM scenarios. The Department of Environment then checks the lists to ensure completeness and that there are no overlaps.

Two to three months before the deadline of the Reporting, the decarbonisation working group members provide their respective information concerning the policies and measures and projections to the Department of Environment, which compiles all the information into the reporting tools and a single paper report. This schedule leaves enough time to perform the remaining QA/QC activities. The Reporting is prepared in a transparent manner. The Reporting is based on the latest version of National Energy and Climate Plan. Key assumptions and policy measures are described and published in a background report to the projections. Furthermore, the Reporting uses publicly available data to a large extent. Not all data can be published, however, due to being confidentially reported by companies. Out of the assumptions, methods and

models used by expert organizations in evaluating policies and measures or used in making the projections, many are publicly available or have been described in public sources.

Accuracy is ensured through several measures. First, all the expert organizations providing information are well-established. Second, the Reporting uses publicly available data and commonly agreed assumptions to as large an extent as possible, and most of the methods and models have been used before in national and international reporting. Third, projections follow the greenhouse gas source and sink categorization recommended by the European Commission (based on the 2006 IPCC Guidelines for National Greenhouse Gas Inventories and revised UNFCCC CRF tables for inventory reporting). Fourth, effect on mitigation of climate change as well as costs and benefits are assessed for such individual or groups of policies and measures that the assessments can be done in an accurate manner giving practical information, taking into account the reasonable amount of work and available data. Furthermore, the QA/QC procedures are strictly followed.

Consistency and comparability are ensured through several measures. The Reporting is based on the National Climate and Energy Plan and its scenarios. At an early stage of preparing the PaMs, a common framework is determined for the baseline scenario. The framework is determined in a collaborative manner between the ministries mentioned under item a), and it is approved (if necessary) by the ministerial committee of the national energy and climate governance system. The framework comprises several parameters related to economic growth, population growth, international climate policy, and price of energy. The framework also includes assumptions on the future use of different sources of energy and waste treatment. All ministries use the common framework while contributing to the Plan and its baseline scenario. Furthermore, under the coordination of Department of Environment, interrelated assumptions are discussed and decided between the relevant ministries and government agencies. These procedures ensure the consistency and comparability of the assumptions and results between the different sectors in the Strategy.

Common parameters provided by the European Commission for the Reporting are used whenever applicable. As the Reporting also strongly relies on the latest version of the National Energy and Climate Plan, the above-mentioned PaMs-making process improves the consistency and comparability of the information used in the Reporting. In the case that the Reporting requires extending or updating assumptions affecting several sectors, the decarbonisation working group members agree on these together. Sector-specific assumptions that are not available in the above-mentioned sources are selected based on the expertise of the decarbonisation working group members or the expert organizations and rely on other relevant strategies, plans and research reports as much as possible. To classify policies and measures under the WEM and WAM projections, a cut-off date is agreed by the decarbonisation working group. Across the different sectors, the reported policies and measures that are implemented on or before the cut-off date belong to the WEM projection and those implemented after the cut-off date or being in planning phase to the WAM projection.

In order to ensure completeness, early on the decarbonisation working group members provide a list of their respective policies and measures to be included in the Reporting, along with a division between the WEM and WAM scenarios, to the Ministry of Employment and the Economy. The Department of Environment then checks the lists to ensure completeness and that there are no overlaps. Furthermore, the projections follow the greenhouse gas source and sink categorization recommended by the European Commission (based on the 2006 IPCC Guidelines for National Greenhouse Gas Inventories and revised UNFCCC CRF tables for inventory reporting).

Description of the information collection process

The base year for projections is the latest year reviewed inventory year of the national GHG emission inventory. Measures which have been introduced before the time of projection preparation are considered as existing measures. Measures expected to be approved later are considered as additional. Predictions of the number of inhabitants are based on information from the Statistical Service. These data are used for the energy models and waste projections. The scenarios of trends in the GDP used in projections are based on predictions provided by Ministry of Finance. These data are used for the EFOM-ENV model and for Waste sector projections. The prices of fuels on the global market and carbon prices are taken from the European Commission (recommended harmonised parameter values where national estimates are not available). The prices of domestic energy sources are based on the costs of their acquisition and are also affected by the competitive energy sources. Energy production projection data and energy consumption development are obtained by the relevant bodies (Transmitting System Operators, Cyprus Energy Regulatory Authority and Energy Service) as well as from projections made by external collaborators. The decision on the projections to be used is taken by the Ministry of Energy. Calculation of GHG emissions from fuel combustion is based on energy balances obtained from the scenarios developed by the model of external collaborators. The projections of GHG emissions in Agriculture are based on trends in the activity data used in the emission inventory calculation. The most important activity data are animal population (particularly cattle and swine population), amount of fertilizers applied to agricultural soils, and annual harvest and production. The development of animal numbers is taken from the Department of Agriculture. The activity data for the base year are taken from the Statistical Service.

The emission estimates in the LULUCF sector are to a large degree determined by development of land areas categorized by their use. Therefore, the LULUCF emission estimates and their projections must primarily methodologically solve the issue of land areas. The actual development of six major IPCC land use categories as reported in the latest emission inventory is used. The projections are based are on the observed trends and anticipation of gradually less intensive land use changes until 2040. The specific attention is given to forest land, which always represents one of the key absorption categories in the emission inventory.

A waste sector projection contains three source categories - emissions from landfills, emissions from wastewater handling and emissions from biological treatment of waste. For the landfill estimation first order decay model is used based on the IPCC waste model template and for the other three sectors tier 1 methodology for the particular source sectors is applied. Activity data for the projections are various. Main socioeconomic drivers used for quantifications (population and GDP) are taken from the Ministry of Finance.

Subsequent activity data are estimated in accordance with scenarios description and particular policy. Different annual reports often provide information regarding costs and energy savings achieved by different programmes and subsidy schemes. Nevertheless, further calculations are needed to evaluate the effect of emission savings in detail.

Description of the alignment with the national inventory system

There are certain parameters that ensure the alignment of projections with the national inventory:

- Data sources: the data sources are the same for both the inventory and the projections
- Methodology: the methodology applied for projections is the latest reviewed inventory methodology (e.g. for 2021 the 2020 inventory methodologies will be used)

- Experts: the experts involved in the preparation of the inventory are the same as the experts involved in the preparation of the projections

In case discrepancies are identified between the inventory and the projections, QA/QC procedures are applied to achieve

Description of the links to arrangements on integrated national energy and climate reports pursuant to Art. 17 of Regulation (EU) 2018/1999

To collect data related to policies and measures and projections, the structure prepared for the preparation of the NECP and reporting 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 are applied.

Description of the quality assurance and quality control activities for reporting of policies and measures and projections

All the expert organizations providing information for the reporting are well-established and have their own QA/QC procedures. Furthermore, the ministries are responsible for the quality of information on their respective policies and measures and projections and perform further checks where applicable, such as comparison to other estimates. The Department of Environment is responsible for collecting and combining all the information and for performing further quality checks. For example, the Department of Environment compares the sectoral projections to the scenarios of the latest Energy and Climate Plan as well as compares the compatibility of the WEM and WAM projections with the effects of policies and measures. The Department of Environment also checks the completeness and that the reporting requirements are met. Sensitivity analyses for projections are carried out for factors being especially significant in terms of greenhouse gas emissions, and they are described in detail in the report accompanying each round of the Reporting. After the reporting tools and paper report have been compiled by the Department of Environment, they are sent to the decarbonisation working group for approval and afterwards to the network of officials for final approval.

Description of the process for selecting assumptions, methodologies and models for making projections of anthropogenic greenhouse gas emissions

Sector experts from the Department of Environment and other key agencies are responsible for selecting the assumptions, methods and models to use for the projections. The Department of Environment experts work closely and interact regularly with other key experts on energy, agriculture, industrial processes, forestry and land use change and waste modelling in order to establish an appropriate set of assumptions and methods. The experts document the data sources, methods and assumptions. Improvement opportunities are regularly identified and documented which includes input from external experts (e.g. consultants). The Department of Environment manages a list of improvements which is reviewed and prioritised on a regular basis for implementation. Changes to processes are documented in the methodology report.

Description of procedures for the official consideration and approval of the Member States national system for policies and measures and projections

All the involved institutions participating to the decarbonisation technical committee of the national governance system for climate and energy have nominated an expert for every reporting preparation period whose responsibility is to provide the necessary data for the report. Institutional experts take part in the quality assessment (QA) process and give the final approval concerning the information in the reporting tools and final report to be submitted.

Information on relevant institutional administrative and procedural arrangements for domestic implementation of the EU's nationally determined contribution, or changes to such arrangements

The domestic implementation of the EU's nationally determined contribution is monitored through regular meetings of the Decarbonisation Working group of the national governance system. Issues, such as budgets, proposals to EU funds are discussed along with different practical issues that may come up during the implementation of the measures.

Description of the stakeholder engagement undertaken in relation to the preparation of policies and measures and projections

All the relevant stakeholders are kept informed through participation in the meetings of the relevant working group of the governance system that will contribute later to the decarbonisation working group.