# Conducting Climate Change Administrative Capacity Assessment

## Draft Report on Institutional Capacity Assessment

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Presented by:

HEAT GmbH
Habitat, Energy Application & Technology
Seilerbahnweg 14
61462 Königstein /Ts.
Germany

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## LIST OF ACRONYMS

| | |
|---|---|
| **AER** | Annual Emission Report |
| **BTR** | Biennial Transparency Report |
| **BUR** | Biennial Update Report |
| **EnC** | Energy Community |
| **ETF** | Enhanced Transparency Framework |
| **EU** | European Union |
| **EU ETS** | European Union Emissions Trading System |
| **MANU** | Macedonian Academy of Sciences and Arts |
| **MoI** | Ministry of Interior |
| **MRR** | Monitoring and Reporting Regulation |
| **MoE** | Ministry of Economy |
| **MoEPP** | Ministry of Environment and Physical Planning |
| **MPG** | Modalities, Procedures and Guidelines |
| **MRR** | Monitoring and Reporting Regulation |
| **MRV** | Measurement, Reporting and Verification |
| **NC** | National Communication |
| **NCCC** | National Climate Change Committee |
| **NDC** | Nationally Determined Contribution |
| **NECP** | Integrated National Energy and Climate Plans |
| **LEDS** | Low Emissions Development Strategy |
| **RES** | Renewable Energy Sources |
| **UNDP** | United Nations Development Program |
| **UNFCCC** | United Nations Framework Convention on Climate Change |

# Executive Summary

The project "Conducting Climate Change Administrative Capacity Assessment" was developed within the "Strengthening institutional and technical Macedonian capacities to enhance transparency in the framework of the Paris Agreement" Project financed by UNDP. The assignment was carried out by HEAT International team of experts with the objective to advance the climate change agenda and capacity building, by conducting systemic and institutional capacity assessment of the national administrative capacity to fulfil the following obligations:

- commitments as a non-Annex I party of the UNFCCC and a party to the Paris Agreement, and also those that it will assume if it becomes an Annex I party;
- commitments arising as a member of the Energy Community (EnC);
- future commitments as country that is a candidate for accession to the European Union, whereby transposition and implementation of the EU acquis in energy and climate will also be required.

Therefore, the capacity assessment provides an overview on the capacity needed to prepare the country for the obligations that will be imposed as an EU member state, or in the future are likely to be imposed by the Energy Community.

The project team developed a methodology for the capacity assessment which can be also applied in similar assessments in the future. Special attention was given to the desk review, i.e. analysis of existing relevant documents, including relevant national laws and bylaws, EU/EnC acquis, acts for internal organization and systematization of posts, climate change strategic documents, especially the Enhanced NDC. Additionally, questionnaires were completed by the junior associates currently working on climate change related tasks in the MoEPP and MoLSP.

The tasks that will potentially require institutional capacity were identified, primarily on the basis of a detailed analysis of relevant EU/EnC legislation and requirements of the UNFCCC, including the Paris Agreement, but also on the basis of the national context. The summary results of this analysis are given in Table 1. A general conclusion is that UNFCCC and EU reporting is closely interlinked and that the same capacities should support both processes.

*Table 1. Tasks for which capacity is needed towards EnC/EU and UNFCCC (including Paris Agreement)*

| Policy | List of tasks |
|---|---|
| **Emissions monitoring and reporting** | • Preparation of: NECP, Long-term Strategy, Biannual progress reports, Annual GHG inventories as well as National Communications, BUR/BTR, NDC |
| **EU ETS** | • Preparation of a bylaw to define the way the national carbon pricing system (emission trading system) will function<br>• Conducting auctions for $CO_2$ credits (in case there is a greater demand than the allowed credits according to the bylaw). In this case, in Macedonia the already existing public procurement system can be used (e-nabavki.gov.mk)<br>• Establishment of a commission for supervision of the implementation of the auctions for $CO_2$ credits<br>• Creating and maintaining a register of issued and transferred credits<br>• Monitoring of emissions verification (reported in the Annual Emission Reports by the operators of installations and aircraft operators). The verification itself, should be done by an independent accredited verifier. |
| **Effort sharing** | • Transpose the Regulation (EU) 2018/842<br>• Calculate the target of North Macedonia in line with the Decision No 406/2009/EC<br>• Monitor the target achievement |

| | |
|---|---|
| **Land-based emissions** | • Transpose the Regulation (EU) 2018/841<br>• Verify the fulfillment of North Macedonia to the commitment stated in the Regulation<br>• Development of National forestry accounting plan according to the Regulation |
| **Road transport** | • Transpose Regulation (EU) 2019/631 and Regulation (EU) 2019/1242<br>• In order to be able to monitor the implementation of the measures in the Transport sector, and increase the transparency of the implementation of the Enhanced NDC (and other strategic documents), it is necessary to coordinate the MoI system with the new MRV platform, which would work best if a mechanism is found for the MoI to enter this data directly into the MRV platform.<br>• Coordination and monitoring of the implementation of the projects that will be defined in the new Program for realization of the Energy Strategy, which is expected to be ready in 2021 (and is based on all strategic documents such as the Energy Strategy, NDC, NECP, TBUR) by the Ministry of Economy |
| **Energy efficiency and renewable energy sources (RES)** | • Monitoring, verification of the data that will be entered in the MVP platform, execution of appropriate changes, communication with the entities that enter information<br>• Coordination of MVP and MRV platforms<br>• Monitoring the implementation of RES measures<br>• Input of RES data in the MRV platform<br>• Coordination and monitoring of the implementation of the projects that will be defined in the new Program for realization of the energy strategy by the Ministry of Economy and the Energy Agency |
| **Carbon capture and storage** | • No tasks envisioned |
| **Ozone layer** | • No tasks envisioned |
| **Fluorinated greenhouse gases (F-gasses)** | • Development of detailed study on the analysis of this section, including a list of concrete policies and measures that should be implemented in order to achieve the HFCs reduction |
| **Adaptation** | • Development and adoption of National Adaptation Strategy<br>• Development of National Adaptation Plan |

Responsibilities and coordination of processes among various public institutions in North Macedonia related to climate change have been established in the Government of North Macedonia (GoNM), with the MoEPP as the main institution responsible for policies, legislation preparation, planning, regulatory action, and reporting on climate situation and climate action. As climate action is cross-sectoral though, coordination and cooperation with other governmental stakeholders are crucial.

Based on the assessment and elaboration of the requirements, as well as the assessment of the present administrative capacities, it can be concluded that strengthening administrative capacity of several public institutions, above all MoEPP, would be needed.

Having in mind that up to now, the preparation of the documents for monitoring, reporting and verification were done mostly by external experts and were project based, the major question was whether these activities should be internalized by the public institutions, or whether external entities should be engaged again. Each option brings benefits and challenges. Heavily relying on external assistance does not contribute towards building the internal administrative capacities, which is a main objective. Applying appropriate administrative arrangement to engage the external entities (tender or long-term cooperation agreement among public institutions or donor supported) might also be faced with uncertainties. On the other hand, completely internalizing the process is not easy due to the fact that the public sector could not attract and employ high-level experts, whose involvement is essential, in sufficient numbers. Therefore, the realistic approach would be to combine these options: the groundwork and the coordination of the entire process would be done internally, but activities that require specialized expertise (such as modelling for climate change mitigation scenarios) and QA/QC

processes should be carried out by external experts. External experts should have rich experience in the preparation of the previous UNFCCC reports, such as MANU, in particular its Research Center for Energy and Sustainable Development (RCESD), the Institute of Agriculture, Faculty of Agricultural Science and Food and Hans Em Faculty of Forest Sciences, Landscape Architecture and Environmental Engineering.

With that considered, the report provides recommendations on the internal administrative capacities needed, such as the number of staff, their educational background and job description, for the institutions identified to have key role in these processes: MoEPP, MoE (Table 6) and EA (Table 7). For all other institutions/sectors, tasks are identified that each institution should appropriately incorporate in the job description of staff who are internally assigned to work on climate change-related activities (Table 8).

The project team proposes two options for strengthening internal administrative capacity at MoEPP to address climate change issues. As climate change is a relatively new area because of the ever-growing requirements laid down in various EU and UN documents, it is not recommended at this stage to foresee numerous posts without making them narrowly specialized. In both options, it is considered that the GHG Inventory will be prepared by the MoEPP (which is according to the draft version of the Law on Climate Action). However, the comparative experience from countries in the region shows that there are also cases where external entities prepare national GHG inventories. In this case, it is important to legally define the way this entity is selected.

Option 1 (see Figure 1) is the recommended option as it is more realistic to be implemented, knowing how difficult new employments in a public institution is to be approved due to the budgetary constraints. Total of eight posts related to climate change have been proposed with this option. They are systematized in the present Unit for Climate Change. The advantage of such approach is that all matters related to climate change will be dealt in within a single organizational unit under the supervision of a Head of Unit. The disadvantage is that certain posts might fit better in other existing units within MoEPP. This especially refers to posts which only or primary tasks relate to development of GHG Inventory and/or administering the MRV platform, which could be incorporated within the MEIC.

Option 2 (see Figure 2) foresees at least ten posts related to climate change, half of them to be systematized in the existing Unit for Climate Change, while the other half in the newly established Unit for GHG Inventory within MEIC. This option reflects the proposal provided by the team that is conducting the Functional Analysis in the MoEPP.

Both options indicate the existing units and posts within MoEPP where climate change related tasks should be clearly added and specified, as opposed to the option to systematize new posts in these units.

Eventually, Ministry of Economy (Table 6) and Energy Agency (Table 7) are identified as institutions that will have key role in certain processes or climate change data processing. The former has a key role in the development of plans and reports on energy and climate change, while the latter is responsible to manage energy efficiency information systems and platforms. Therefore, for these two institutions very detailed tasks are proposed, which do not imply that new posts must be systematized, but they can be incorporated to the existing posts.

Implementing a national administrative system for climate change requires suitable resources. Establishing and maintaining proper organizational relationships, establishing and adapting data flows, recruiting and retaining expertise, developing and implementing systems and tools, and delivering new outputs all require careful planning and maintaining of resources.

*Figure 1. Organogram – Option 1 for Unit for Climate Change Policy in MoEPP*

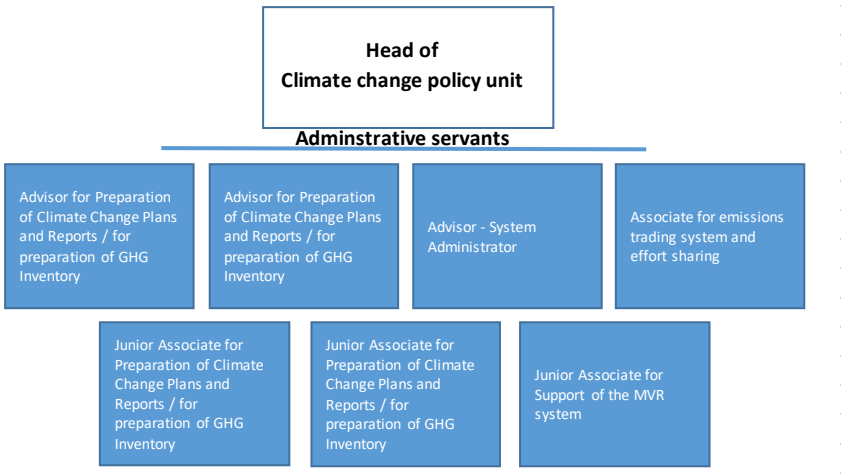
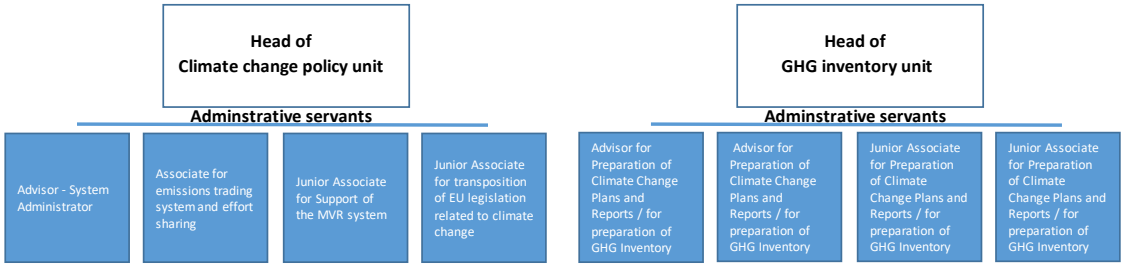



*Figure 2. Organogram – option 2 for Unit for Climate Change Policy and Unit for GHG Inventory in MoEPP*




The calculations illustrate that the annual total budget for the Unit for Climate Change in the MoEPP can be from almost EUR 130,000 to almost EUR 165,000, depending on how internal administrative capacity in relation to climate change is strengthened. The main drivers of costs are human resources and their historical costs in terms of wages and salaries as per the experiences with human and financial resources from the Macedonian state budget. Salaries for junior staff are increased by a factor of 30% to take into account backstopping, succession planning and backup support for busy times as per the Handbook on institutional arrangements to support MRV/transparency of climate action and support.

# 1 Introduction

## 1.1 Background of the sector

UNDP and the Ministry of Environment and Physical Planning (MoEPP) are implementing the project "Macedonia's Fourth National Communication (NC) and Third Biennial Update Report (BUR) on Climate Change under the UNFCCC (4th NC/3rd BUR)" and "Strengthening institutional and technical Macedonian capacities to enhance transparency in the framework of the Paris Agreement" (CBIT Project). Both projects provide support to the country in fulfilling the country's commitments under the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement. Additionally, UNDP is supporting the Macedonian Government to revise its Nationally Determined Contributions on Climate Change (Enhanced NDC), as the overarching climate change policy document.

Furthermore, as the CBIT Project title indicates, the immediate objective of the project is to meet enhanced transparency requirements as defined in Article 13 of the Paris Agreement by strengthening institutional and technical capacity for measuring and reporting on emissions, mitigation and adaptation activities, and support received. It will use three means of strengthening capacity in this area: 1) Strengthening national institutions for Monitoring, Reporting and Verification (MRV) and aligning transparency activities with country priorities; 2) Ensuring that organizations and individuals have the necessary training and tools to conduct MRV activities; and 3) Transitioning arrangements for data collection, analysis, and reporting from a project-based cycle to a continuous process.

Moreover, a Climate Change unit in the MoEPP has been supported by the project, comprising 5 junior associates with different backgrounds. After project end, MoEPP should absorb this unit into its structure.

## 1.2 Objectives and specific tasks of the assignment

This specific assignment aims at advancing the climate change agenda and capacity building, by conducting systemic and institutional capacity assessment of the national administrative capacity to fulfil the country's obligations in particular towards UNFCCC and the Paris Agreement.

This report presents the results of the following tasks performed by the engaged experts' team:

1. Conduct a desk review of current relevant capacity assessments, referring to EU Climate Acquis/Energy Community requirements, individual capacity building and the ongoing functional analysis in MoEPP (will be provided by the project), identify synergies with other relevant requirements (National environmental information system, Energy community reporting, EU reporting, Green deal) and prepare an overview of existing institutional competences;
2. Propose methodology and criteria for the capacity assessment and for pinpointing future organizations/companies/NGOs to implement UNFCCC activities;
3. Assess the capacity of the existing institutional organization and structures at the systemic and institutional/organizational level in the country with regard to reporting under the UNFCCC and the Paris Agreement and monitoring implementation of the national climate change strategic documents (Biennial Update Reports, National Communications, Strategy on Climate Action, enhanced Nationally Determined Contributions - NDC etc.);
4. Support development of the MoEPP functional analysis relevant to climate change capacities and the Climate Change Unit established within the CBIT project;
5. Develop a protocol for providing "on-call" support (provided by the Climate change unit) to other sectoral ministries and government agencies as needed;
6. Prepare a financial roadmap (national and external sources) of long-term support for the Climate Change Unit personnel and activities;
7. Propose a step by step guidance to strengthen institutional and technical capacity for NDC transparency at the systemic and institutional/organizational level;

8. Conduct capacity assessment at the systemic and institutional/organizational level to identify critical skills gaps for NDC implementation and based on the findings, develop a mid-term capacity building plan;
9. Summarise findings in a report and accompanying action plan that drives and facilitates concrete activities and monitoring.

## 1.3 General information about the report

In the preparation of this report the following three local experts were involved:

1. Aleksandra Dedinec as climate change specialist,
2. Darko Janevski as institutional specialist, and
3. Marjan Nikolov as finance specialist.

They were assisted by Matej Gasperic as international climate change specialist.

. Due to the restrictions caused by COVID 19 pandemic, the expert's' team was prevented from having regular and broader physical meetings with the stakeholders. Therefore, most of the work was done through desk research and online meetings and consultations among the experts' team, as well as communication with the junior associates from the Climate Change unit who gave valuable input.

The report has the following structure, which to great extent mirrors the order of ToR tasks:

- Methodology for capacity assessment to implement climate change related activities, which was partially applied within this assignment due to the above-mentioned restrictions and above all because within the recently conducted similar assessment (as part of another donor funded project) and the ongoing functional analysis of the MoEPP similar methodological steps were implemented and results of them shared with the experts' team. However, the methodology is written in a manner that it can be applied to any future capacity assessment on this subject matter;
- Elaboration of the requirements stemming from the EU, Energy Community (EnC) and UN policy and legal documents and what they mean in terms of country's obligations for developing of policies, strategic documents and reports, legislation and regulation and for introduction of MRV systems in the Republic of North Macedonia;
- Overview and findings of the current administrative capacities of the relevant national institutions with main emphasis on the capacity of the MoEPP, and to some extent on the Cabinet of Deputy Prime Minister responsible for Economic Affairs (DPMEA), Ministry of Economy (MoE) and Energy Agency (EA), while for all others, which it can be fairly said have no major role in the climate change processes, only general information (roles and responsibilities of the institution) is given;
- Additional capacity requirements section, which builds upon the findings from the previous one, and provides very detailed overview of what the implementation of each relevant and elaborated international policy or legal document would entail in terms of administrative capacity needed;
- Posts needed to strengthen the administrative capacity are presented in terms of the number and title of the posts needed to be systematized, as well as the administrative servant's level, educational background and list of tasks for that post. Two options are provided for the systematized posts in the MoEpp, which do not significantly differ from each other; Similarly, proposal for type of posts and tasks are provided for two other institutions that have more important role, while of other institutions only the key tasks are listed.;
- Both options are accompanied with a financial roadmap, i.e. details on the budget funds needed to employ the staff, including additional expenditures related to it such as use of goods and services and capital expenditures;
- Action Plan for implementation of the strengthened administrative capacity and financial roadmap is the last section of the report;
- Annexes to this report include:

- Good Practice from the region - Slovenian administrative system established to manage the climate change policy and legal requirements
- Questionnaires which are part of the methodology
- List of relevant documents which were considered while preparing this report
- Summarized results from the questionnaires completed by the junior associates from the Climate Change unit.

# 2 Methodology for capacity assessment to implement climate change related activities

The following section provides Methodology for capacity assessment to implement climate change related activities. It is proposed to be applied in the future to assess institutional capacities to implement the processes stemming from international documents or national legislation on climate change.

This methodology is based on the Methodology for Functional Analysis in the Public Sector in the Republic of North Macedonia developed by the Ministry of Information Society and Administration, the methodology for capacity assessment that the EU project "Preparation of Long-term strategy and Law on Climate Action – Republic of North Macedonia" has used recently to perform institutional analysis and assessment of the administrative capacity needs for climate action, as well as best practices.[1]

The key element of the methodology for conducting capacity assessment is consultations with the governmental institutions forming the administration responsible for climate change. These consultations may take a form of meetings/interviews and/or designing and completing of a questionnaire by the stakeholders. Any finding and recommendation for the institutional capacities must take into account the perception and opinion of the involved staff.

## 2.1 Phases in the methodology

Table 2 contains the proposed methodology phases.

*Table 2. Capacity assessment methodology phases*

| Phases | Activities |
|---|---|
| **Commencing the capacity assessment** | Decision of the Minister or other high official (state advisor) in institution (MoEPP) to start the process and appoint the team and inform the ministry's and other institutions staff about it. Such a formal decision reinforces the importance of the assessment among those being consulted |
| **Planning** | The appointed team prepares a mini action plan, with deadlines and responsible persons for completion of each step and phase<br>The team collects the relevant documents for desk review<br>The team decides if the proposed questionnaire in this methodology will be modified or used as it is<br>The team defines the scope and profile of persons to whom the questionnaire will be disseminated and consultative meetings held |
| **Research and consultations** | Desk review of relevant documents<br>Dissemination and completion of the questionnaires<br>Conducting meetings with the persons identified as relevant for the Climate Action process |

[1] The structure of this report resembles the one from the mentioned EU project. The analysis conducted in the previous project has been deepened and refined in this project in several ways though:
- Equal attention paid to the requirements of both the EU, the EnC and the UNFCCC;
- Review of suggested jobs, addition of specific list of responsibilities for each suggested position
- Task descriptions for ech job position based on a detailed analysis of the requirements, including the guidelines given in the Handbook on Implementation of the Climate Change Legislation applied to the specific context in North Macedonia.

| | |
|---|---|
| **Analysis and drafting report** | Analysis of the collected data through desk research, completed questionnaires and consultative meetings<br>Drafting report with findings and recommendations |
| **Presenting and finalizing the report** | Present the report's findings and recommendations to all involved parties, especially the managerial staff<br>Finalize the report based on the feedback received |

## 2.2 Questionnaire and interviews

For the purpose of consultations, the questions related to the institutional analysis provided in the Annex 2 of this Report could be used, either in form of a written questionnaire or at the meetings / interviews.

## 2.3 Desk review

The desk review takes into account the following:

1. Relevant laws and bylaws for climate change
2. Act of internal organisation
3. Act of Systematisation of posts
4. Data on number of employees and vacancies by sector/function
5. Internal rules and procedures
6. Strategies and action plans in the area of climate change
7. Work programme of the institution
8. Budget for the last three years
9. Annual performance reports of the institution
10. Overview of the internal set-up of similar organisation in the country or in other countries

In addition, the list of relevant documents and reports which were taken into account while preparing this report is given in Annex 3.

## 2.4 Analysis and presentation of results

There is no generally accepted method how the analysis should be made and specific proposals for strengthened administrative capacity be provided. Here the experience and skills of the persons conducting the assessment are crucial. However, following instructions might facilitate this phase.

| Requirement | What non-compliance with the requirement might indicate |
|---|---|
| **All national strategies, action plans, reports and legislation related to climate change stemming from the ratified international agreements and obligation for harmonization of the national legislation with that of the EU are in place and / or regularly prepared** | If no, it might indicate that the country has no well-established coordination system and / or that institution has no sufficient administrative capacity (number or qualified staff) to transpose the obligations into the national system<br>Documents failed to be adopted give indication for the type of capacities that are missing or should be strengthened |
| **Responsible institutions implement all requirements and obligations stemming from the national strategies, action plans and legislation related to climate change** | If no, it might indicate that the institution has no implementation capacity due to lack of staff or lack of qualified staff |

| | |
|---|---|
| | Obligations failed to be observed give indication for the type of capacities that are missing or should be strengthened |
| **Institution's strategic plans and annual work programs adequately address the goals and activities related to climate change** | If no, it might indicate that management staff in the climate change related organizational units is missing or it does not address the needs to the top management |
| **Type of requirements and obligations that the institution is not implementing in practice or it implements with delays or serious difficulties** | List of such requirements and obligations guides the institution where should the capacities be strengthened (by employing new staff, reallocation of staff or tasks internally, or |
| **Internal reasons for non-implementation of obligations or implementation with delays or serious difficulties such as lack of human, financial and other resources or shared responsibilities with other organizational units** | It might indicate the type of action to be implemented to solve the issue, if and what resources should be strengthened (number and profile of new employees) or internal restructuring is needed (different allocation of tasks among various units) |
| **External reasons for non-implementation of obligations or implementation with delays or serious difficulties such as the cooperation and obtaining relevant data from other responsible institutions is weak or missing** | It might indicate that the institution has sufficient and adequate staff and internal organization, but coordination with other institutions should be improved, which must involve top management of all involved institutions and Government |
| **Tasks among the employees who work on climate change related issues are well allocated in terms of balanced scope of work and employee's adequacy (qualification and expertise)** | If not, it indicates that list of tasks for certain systematized posts should be changed to reflect the real needs or that certain employees need to be mentored or training provided to cope with the tasks allocated |
| **Each employee performs only the tasks prescribed in the scope of work for his/her post** | If not, it indicates that there are tasks performed in practice but not prescribed or that in order certain tasks to be efficiently performed entail more employees or that certain employees cannot cope with the tasks and others have to take them over or indicates the vacant post that has priority in filling in |
| **Employees attend training and use other means to build their capacities to perform the tasks allocated** | If not, it gives signal for the type of obligations and tasks that might not be performed efficiently or even be left aside due to lack of knowledge and skills among certain employees |

***Note:*** Though this methodology is a proposal for future assessment of capacity to implement climate change related activities, the expert's team applied it in a simplified and shortened form to come up with the findings and recommendations contained in this report. Additionally, aggregated answers from the questionnaires completed during December 2020 by the junior associates who work on climate changes related tasks in the MoEPP and MoLSP are given in Annex 4 of the Report.

# 3 Requirements related to climate change

The Republic of North Macedonia, a non-Annex I party to the United Nations Framework Convention on Climate Change (**UNFCCC**) has signed in 2015 and ratified in January 2018 the Paris Agreement, which is the leading and most important legally binding international document on climate change. As a non-Annex I party, North Macedonia does not have quantified commitments. Despite this fact, it is voluntarily attempting to incorporate Annex I principles as much as possible.

Additionally, the Republic of North Macedonia is a Contracting Party of the Energy Community (**EnC**) whose key objective is to extend the EU internal energy market rules and principles to countries in South East Europe, the Black Sea region and beyond on the basis of a legally binding framework. On the other hand, North Macedonia is a country that has begun the process of **EU** pre-accession, so transposition and implementation of the EU acquis in energy and climate is also required.

Therefore, key requirements under the UNFCCC, EnC and EU are addressed in this chapter. For each of these requirements, an assessment of the tasks for which capacity is needed is made.

Review on key EU and EnC legislation and policies and tasks for capacity needs

The EU has ambitious policies and measures that enable it to achieve the set goal of reducing net emissions by 55% in 2030 compared to 1990. By 2050, the plan is for Europe to be the first climate-neutral continent in the world. Climate action is at the heart of the European Green Deal – a set of ambitious measures aiming at cutting greenhouse gas emissions, but also including investments in cutting-edge research and innovation and preservation of Europe's natural environment.

As presented by European Commission, EU policies and legislation that are key to achieving these goals are:

- **Emissions monitoring & reporting**
- EU Emissions Trading System (**EU ETS**) to reduce greenhouse gas emissions from the power sector, industry and flights within the EU
- **Effort-sharing** - national targets for sectors outside emissions trading, such as transport, buildings and agriculture
- Ensure that **Land-based emissions** (forests and land) contribute to the fight against climate change
- Reducing greenhouse gas emissions from **road**, e.g. through $CO_2$ emission standards for vehicles
- Boosting **energy efficiency**, **renewable energy** and **governance of EU** countries' energy and climate policies
- Promoting innovative **low-carbon technologies**
- Phasing down climate-warming **fluorinated greenhouse gases**
- Protecting the **ozone layer**
- **Adapting** to the impacts of climate change
- **Funding** climate action

The key EU policies are elaborated in detail in this chapter, including the relevant EU legislation, their application in North Macedonia, as well as the information for which tasks capacity will be needed. Additionally, since some of the EU/EnC requirements are in close correlation to the UNFCCC requirements and the Paris Agreement, some of them are presented in this subchapter.

### 3.1.1 Emissions monitoring & reporting

Requirements: In order to be able to monitor and report the fulfillment of the defined objectives by the EU, each Member State is required to monitor greenhouse gas emissions, according to internal EU reporting rules. The reporting includes:

- emissions of seven greenhouse gases (the greenhouse gas inventory) from all sectors: energy, industrial processes, land use, land use change & forestry (LULUCF), waste, agriculture, etc.
- projections, policies & measures to cut greenhouse gas emissions
- national measures to adapt to climate change
- low-carbon development strategies
- financial & technical support to developing countries, and similar commitments
- national governments' use of revenues from the auctioning of allowances in the EU emissions trading system (they have committed to spend at least half of these revenues on climate measures in the EU and abroad)

The relevant EU legislation related to the Climate Monitoring Mechanism is the following:

- Regulation 525/2013 – Climate Monitoring Mechanism
- Regulation 749/2014 – requirements for national reporting under Regulation 525/2013
- Regulation 666/2014 – requirements for the EU inventory system under Regulation 525/2013

However, the Regulation on the Governance of the Energy Union and Climate Action (Regulation (EU) 2018/1999) updates the Climate Monitoring Mechanism, synchronises and brings it in line with the transparency requirements of the Paris Agreement, and makes it fit for tracking progress with the 2030 climate and energy legislation, while reducing administrative burden. The Climate Monitoring Mechanism Regulation is the relevant framework until 1 January 2021. From then onwards, it is repealed and replaced by the Regulation on the Governance of the Energy Union and Climate Action.

Similarly, the two afore mentioned regulations on national climate reporting and requirements for the EU inventory systems are repealed and replaced accordingly by:

- Commission Implementing Regulation (EU) 2020/1208 – requirements for national reporting
- Commission Delegated Regulation (EU) 2020/1044 – requirements for the EU inventory systems under Regulation on the Governance of the Energy Union and Climate Action including setting out the inventory guidelines and defining values for the global warming potentials based on the IPCC Fifth Assessment Report.

In these regards, relevant capacity is needed to fulfil the following requirements defined under the Regulation (EU) 2018/1999:

- Integrated National Energy and Climate Plans - NECP (every 10 years, covering mainly a period of 10 years, but taking into account a longer-term perspective). Update of the integrated national energy and climate plan should be submitted to the Commission in around five years after the preparation of its latest notified NECP
- Long-term Strategies (every 10 years, covering a planning period of at least 30 years). The Strategy should be updated every 5 years (where necessary)
- Biennial progress reports and their follow up - Integrated National Energy and Climate Progress Reports (every two years). The report to the Commission should include the status of implementation of the integrated national energy and climate plan covering all five dimensions of the Energy Union
- Annual reporting - Greenhouse gas inventories

The Energy Community Ministerial Council adopted Recommendation 2018/01/EnC-MC in November 2018, which:

- urges the Contracting Parties to 'prepare the analytical, institutional and regulatory preconditions for the development and adoption of integrated national energy and climate plans ('NECPs') for the period from 2021 to 2030'.
- establishes the Energy and Climate Committee to coordinate and support the Contracting Parties in their efforts.

National context: In Macedonia the Integrated National Energy and Climate Plans, as well as the Integrated National Energy and Climate Progress Reports are prescribed in the amendments of the Energy Law (still not adopted by the Government). According to it, the **Ministry of Economy** is the responsible institution for these documents. From the EnC countries, North Macedonia was the first country that prepared the draft version of the Integrated National Energy and Climate Plan in 2020. It was prepared by the **Macedonian Academy of Sciences and Arts** (MANU).

Additionally, the preparation of Long-term Strategy and the Greenhouse gas inventories are prescribed in the draft version of the Law on Climate Action. According to it, the **Ministry of Environment and Physical Planning** is the responsible institution for these documents. In North Macedonia, the draft version of the first Long-term Strategy on Climate Action is prepared in 2020 by GFA Consulting Group, in cooperation and support from national and international experts (including MANU). Furthermore, GHG inventories are regularly prepared in North Macedonia, due to the reporting requirements to the UNFCCC, by the academia sector (MANU, Institute of Agriculture, Faculty of Agriculture and Hans Em Faculty of Forest Sciences, Landscape Architecture and Environmental Engineering).

Additional transparency of all activities concerning climate change is provided by the national climate change platform klimatskipromeni.mk. As stated in the platform, "The motivation for creating this portal was the need to establish a communication platform that will be a starting point for information related to climate change and climate action in the country, both nationally and locally. Every piece of information reflects the face of climate change from a Macedonian perspective and our efforts to adapt more easily."

The portal was prepared with technical and financial support from the United Nations Development Program (UNDP) and the Global Environment Facility (GEF), and the Department of Public Relations of the MoEPP is the body responsible for maintaining the portal and in general for communication on climate change.

### 3.1.2 EU Emissions Trading System (**EU ETS**)

Requirements: The EU emissions trading system (EU ETS) is a cornerstone of the EU's policy to combat climate change and its key tool for reducing GHG emissions cost-effectively. It is the world's first major carbon market and remains the biggest one.

The **relevant EU legislation** related to the EU ETS is the following:

- 08/04/2018 - Consolidated version of Directive 2003/87/EC of the European Parliament and of the Council establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC
- 19/03/2018 - Directive (EU) 2018/410 of the European Parliament and of the Council of 14 March 2018 amending Directive 2003/87/EC to enhance cost-effective emission reductions and low-carbon investments, and Decision (EU) 2015/1814 (Text with EEA relevance)
- 23/04/2009 - Directive 2009/29/EC of the European Parliament and of the Council amending Directive 2003/87/EC so as to improve and extend the greenhouse gas emission allowance trading scheme of the Community
- 19/11/2008 - Directive 2008/101/EC of the European Parliament and of the Council amending Directive 2003/87/EC so as to include aviation activities in the scheme for greenhouse gas emission allowance trading within the Community

- 27/10/2004 - Directive 2004/101/EC of the European Parliament and of the Council amending Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading within the Community, in respect of the Kyoto Protocol's project mechanisms
- 13/10/2003 - Directive 2003/87/EC of the European Parliament and of the Council establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC

In order to monitor the implementation of the EU ETS or the national carbon pricing system, a detailed monitoring, reporting and verification system is needed for increasing the transparency of the process. Both carbon market participants and competent authorities want assurance that one tonne $CO_2$ equivalent emitted is equivalent to one tonne reported. This principle has become known as the phrase: "A tonne must be a tonne!"[2]

In EU, since the beginning of the third trading period in 2013, the monitoring and reporting of GHG emissions needs to be in line with the EU Monitoring and Reporting Regulation (MRR - Commission Regulation (EU) No 601/2012). Every year, operators of installations and aircraft operators need to hand in an Annual Emission Report (AER) that is in line with the MRR to the Competent Authority. The AER is the key document that provides the amount of emitted greenhouse gases of the operator in a given year. The AER needs to be verified by an independent accredited verifier. The verification of emission reports and accreditation of verifiers need to be in line with the Regulation (EU) 2018/2067 on the verification of data and on the accreditation of verifiers following Directive 2003/87 / EC on establishing a scheme for greenhouse gas emission trading within the Community and amending Council Directive 96/61/EC.

The current Energy Community acquis does not include any framework for carbon pricing. However, according to EnC "A gradual alignment of the Energy Community carbon pricing policies with those of the EU would ensure a level playing field in the context of regional and pan-European market integration". In this regard, the Secretariat launched a study on carbon pricing design in the Energy Community in 2020. Therefore, EnC analyses the problem of designing some transitional carbon pricing mechanism by each Contracting Party (separately or as part of an Energy Community-wide design) which will prepare the Contracting Parties for joining the EU ETS in the future.

According to the Handbook on the Implementation of EU Climate Change Legislation[3], accessing the EU ETS will require allocation of responsibilities for preparing the background to policy related decision making to ministry departments and additionally a number of decisions will be needed for the EU ETS implementation.

National context: Even before North Macedonia becomes an EU member, according to the guidelines of the Energy Community and in line with the Energy Strategy adopted by the Government, as well with the Enhanced NDC, it will be necessary (voluntarily or obligatory) to establish a national carbon pricing system in order to achieve the ambitious national climate change targets. The introduction of a such system would be a step towards entry into the European Union's scheme upon joining.

In this regard, the experiences of the member states of the Energy Community show that two countries have already established their form of systems for carbon pricing: Montenegro and Ukraine. For example, the Montenegrin system[4] is based on the granting of credits to certain facilities on the basis of the "Regulation of activities or business activities that emit greenhouse gases for which license for emissions of greenhouse gases should be issued" ("Uredbu o aktivnostima odnosno djelatnostima koje emituju gasove sa efektom staklene bašte za koje se izdaje dozvola za emisiju gasova sa efektom staklene bašte"). This regulation defines the minimum price of credits, allowed annual level of emissions (and their dynamics until 2030), which facilities are eligible for free credits, manner of

[2] https://ec.europa.eu/clima/sites/clima/files/docs/ets_handbook_en.pdf

[3] http://www.ecranetwork.org/Files/Handbook_on_Implementation_of_Climate_Change_Legislation.pdf

[4] https://ec.europa.eu/neighbourhood-enlargement/sites/near/files/pdf/key_documents/2014/20140919-csp-montenegro.pdf

conducting auctions (there are auctions only when the demand for credits is higher than the allowed level of issues), the content of the register of issued and transferred credits.

Taking into account the Montenegrin example, the required administrative capacities are not that extensive, and the following would be mainly the tasks to be performed:

- Preparation of a bylaw to define the way the national carbon pricing system (emission trading system) will function,
- Conducting auctions for $CO_2$ credits (in case there is a greater demand than the allowed credits according to the bylaw). In this case, in Macedonia the already existing public procurement system can be used (e-nabavki.gov.mk),
- Establishment of a commission for supervision of the implementation of the auctions for $CO_2$ credits
- Creating and maintaining a register of issued and transferred credits,
- Monitoring of emissions verification (reported in the Annual Emission Reports by the operators of installations and aircraft operators). The verification itself, as previously mentioned, should be done by an independent accredited verifier

### 3.1.3 Effort-sharing

Requirements: The **relevant EU legislation** related to the Effort-sharing is the following:

- 30/05/2018 - Regulation (EU) 2018/842 - Binding annual greenhouse gas emission reductions by Member States from 2021 to 2030 contributing to climate action to meet commitments under the Paris Agreement and amending Regulation (EU) No 525/2013
- 23/04/2009 - Decision No 406/2009/EC - Effort of Member States to reduce their greenhouse gas emissions to meet the Community's greenhouse gas emission reduction commitments up to 2020

To achieve a climate-neutral EU by 2050 and the intermediate target of an at least 55% net reduction of GHG emissions by 2030, the Commission is proposing the national targets collectively to deliver a reduction of around 30% in total EU emissions from the sectors covered by 2030, compared with 2005 levels. The Regulation on binding annual emission reductions by Member States from 2021 to 2030 (Effort Sharing Regulation) adopted in 2018 is part of the EU strategy and the EU's implementation of the Paris Agreement.

The Effort sharing directive includes all the gasses according to the IPCC from the categories Energy, IPPU, Agriculture and Waste, which are not part of the EU ETS. In contrast to sectors in the EU ETS, which are regulated at EU level, Member States are responsible for national policies and measures to limit emissions from the sectors covered by Effort Sharing legislation.

According to the European Commission[5] examples of potential policies and measures include:

- reducing transport needs
- promoting public transport
- a shift away from transport based on fossil fuels
- support schemes for retrofitting buildings
- more efficient heating and cooling systems
- renewable energy for heating and cooling
- more climate-friendly farming practices
- conversion of livestock manure to biogas.

According to Regulation 2018/842, no special requirements for institutional capacity are foreseen. In that direction is the example with Croatia, which when it becomes an EU Member State is only added to the list of countries with a certain target of these sectors (+ 11% by 2020), without meeting some

[5] https://ec.europa.eu/clima/policies/effort_en#tab-0-0

special conditions. Two additional examples that can be considered relevant are the agreements for the start of negotiations with the EU of Ukraine and Moldova, which do not provide obligations under the Effort Sharing Decision.

National context: For Macedonia to implement the Effort Sharing Regulation, a precondition is the preparation of a bylaw to define the way the emission trading system will function, so that it can be determined which emissions will be included in the Effort Sharing obligation. According to the Regulation, the target for each country is determined on the basis of GDP per capita, in accordance with Decision No 406/2009/EC.

The measures and policies needed to meet the given goal in Macedonia are already incorporated in the strategic documents, with the exception of the measures for the IPPU sector (F-gasses), in which special attention will have to be paid in the following documents related to Climate Change. (National Communication, BURs, NDCs, NECPs). Also, in terms of reporting, there are no additional obligations required, other than those already provided in the "Emissions monitoring & reporting" section.

Based on this, administrative capacity is needed to implement the following:

- Transpose the Regulation (EU) 2018/842
- Calculate the target of North Macedonia in line with the Decision No 406/2009/EC
- Monitor the target achievement

### 3.1.4 Land-based emissions

Requirements: The **main relevant EU legislation** related to the Land use, Land Use Change and Forestry includes the following:

- 18/06/2019 - SWD/2019/213 - Commission staff working document: Assessment of the National Forestry Accounting Plans, accompanying the document Communication from the Commission: United in delivering the Energy Union and Climate Action - Setting the foundations for a successful clean energy transition
- 19/06/2018 - Regulation (EU) 2018/841 - Inclusion of greenhouse gas emissions and removals from land use, land use change and forestry in the 2030 climate and energy framework, and amending Regulation (EU) No 525/2013 and Decision No 529/2013/EU
- 21/05/2013 – Decision No 529/2013/EU - Accounting rules on greenhouse gas emissions and removals resulting from activities relating to land use, land-use change and forestry and on information concerning actions relating to those activities

The Regulation (EU) 2018/841 sets out the commitments of Member States for the land use, land use change and forestry ('LULUCF') sector that contribute to achieving the objectives of the Paris Agreement and meeting the greenhouse gas emission reduction target of the Union for the period from 2021 to 2030. This Regulation also lays down the rules for the accounting of emissions and removals from LULUCF and for checking the compliance of Member States with those commitments. The commitment according to this Regulation is that each Member State shall ensure that emissions do not exceed removals, calculated as the sum of total emissions and total removals on its territory in all of the land accounting categories.

Additionally, according to this Regulation, Member States shall submit to the Commission their national forestry accounting plans, including a proposed forest reference level, by 31 December 2018 for the period from 2021 to 2025 and by 30 June 2023 for the period from 2026 to 2030.

National context: Currently in Macedonia, all recent relevant strategic documents for climate change include policies and measures from the LULUCF sectors. However, it is necessary in the future to make explicit verification whether the total GHG emissions and removals from these sectors are in line with the Regulation (EU) 2018/841. Additionally, there is no National forestry accounting plan yet developed in Macedonia, which is required by the Regulation.

Based on this, capacity is needed to implement the following:

- Transpose the Regulation (EU) 2018/841
- Verify that the inclusion of the GHG emissions and removals from the LULUCF in the already developed documents in North Macedonia are in line with this Regulation
- Verify the fulfillment of North Macedonia to the commitment stated in the Regulation
- Development of National forestry accounting plan according to the Regulation

In all of these activities it is recommended that the already engaged team of experts within the preparation of the UNFCCC documents from the Faculty of Agricultural Science and Food and Hans Em Faculty of Forest Sciences, Landscape Architecture and Environmental Engineering is involved. Additionally, the capacity involved in the preparation of the GHG inventory is also important to be included in the implementation of these activities.

### 3.1.5 Road transport

Requirements: The **main relevant EU legislation** related to the Transport sector is the following:

- Regulation (EU) 2019/631 for setting CO2 emission performance standards for **new passenger cars** and for **new light commercial vehicles**, and repealing Regulations (EC) No 443/2009 and (EU) No 510/2011
- Regulation (EU) 2019/1242 setting CO2 emission performance standards for **new heavy-duty vehicles** and amending Regulations (EC) No 595/2009 and (EU) 2018/956 and Directive 96/53/EC
- Directive 1999/94/EC relating to the **availability of consumer information** on fuel economy and CO2 emissions in respect of the marketing of new passenger cars
- 24/12/2018 - Directive 98/70/EC - **The quality of petrol and diesel fuels** - Consolidated version (including the Amendments)

Regulation (EU) 2019/631 sets from 1 January 2020, EU fleet-wide target of 95 g CO2/km for the average emissions of new passenger cars and an EU fleet-wide target of 147 g CO2/km for the average emissions of new light commercial vehicles registered in the Union, as measured until 31 December 2020 in accordance with Regulation (EC) No 692/2008 together with Implementing Regulations (EU) 2017/1152 and (EU) 2017/1153, and from 1 January 2021 measured in accordance with Regulation (EU) 2017/1151. This Regulation will, until 31 December 2024, be complemented by additional measures corresponding to a reduction of 10 g CO2/km as part of the Union's integrated approach referred to in the Commission's communication of 7 February 2007 entitled 'Results of the review of the Community Strategy to reduce CO2 emissions from passenger cars and light-commercial vehicles'.

National context: The transposition of EU legislation related to climate change in the Transport sector falls within the competence of the Ministry of Economy. The first two regulations (from the above) should be transposed into the Law on Vehicles. Directive 1999/94/EC is transposed in Macedonia with the Rulebook on the information available to the consumer on fuel consumption and $CO_2$ emissions in relation to the sale of new passenger vehicles. The latest Fuel Quality Directive has been partially transposed by the new Liquid Fuel Quality Regulation ("Уредба за квалитет за течни горива"), which is to be adopted on the basis of the 2018 Energy Law. The part that has not been transposed refers to the Sustainability criteria for biofuels, which will probably be transposed by the new Law on Biofuels or the bylaws that will result from it.

Regarding monitoring and reporting requirements, it should be noted that in Macedonia data related to $CO_2$ emissions are collected starting from 2019 with the adoption of the new Law on Vehicle Tax, by the Customs Authority, because the taxation of vehicles is done based on $CO_2$ emissions. The $CO_2$ Customs Authority data is read from the Certificate of Conformity (COC) for the vehicles. Additionally, in accordance with the Rulebook on the form and content of the traffic license and the certificate for test driving, as well as the manner and procedure for their issuance ("Правилникот за

формата и содржината на обрасците на сообраќајната дозвола и на потврдата за пробно возење, како и начинот и постапката за нивно издавање"), the Ministry of Interior (MoI) should enter the information on $CO_2$ emissions in the traffic licenses, which means that this information should be included in the system (in addition to the other data that the Ministry of Interior already keeps for all vehicles in Macedonia).

In relation to the road transport, administrative capacity is needed to implement the following:

- Transpose Regulation (EU) 2019/631 and Regulation (EU) 2019/1242
- In order to be able to monitor the implementation of the measures in the Transport sector, and increase the transparency of the implementation of the Enhanced NDC (and other strategic documents), it is necessary to coordinate the MoI system with the new MRV platform, which would work best if a mechanism for the Ministry of Interior is found for the MoI to enter this data directly into the MRV platform.
- Coordination and monitoring of the implementation of the projects that will be defined in the new Program for realization of the energy strategy, which is expected to be ready in 2021 (and is based on all strategic documents such as the Energy Strategy, Enhanced NDC, NECP, TBUR) by the Ministry of Economy

### 3.1.6 Energy efficiency and renewable energy sources (RES)

Requirements: The **relevant EU legislation** related to the Energy efficiency and RES is the following:

- Directive 2010/31/EU on the energy performance of buildings
- Directive 2012/27/EU on energy efficiency, amending Directives 2009/125/EC and 2010/30/Eu and repealing Directives 2004/8/EC and Directive 2006/32/EC
- Directive (EU) 2018/2002 amending Directive 2012/27/EU on energy efficiency
- Directive 2009/28/EC on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC
- Directive (EU) 2018/2001 on the promotion of the use of energy from renewable sources (recast)

National context: Directive 2010/31/EU and Directive 2012/27/EU are transposed in the Energy Efficiency law enacted in February 2020. It is necessary in some future step to make an update of the Law in accordance with the amendments to the Energy Efficiency Directive of 2018 (Directive (EU) 2018/2002). The provisions of the Law have been translated into appropriate energy efficiency measures in the Energy Strategy, and thus in the Enhanced NDC, TBUR, NECP.

Additionally, the Law on Energy Efficiency defines a system for verification (MVP) of energy savings from the implemented measures by various entities in Macedonia. This system is an obligation of the Energy Agency and given that the Energy Agency has only two engineers, and given the other obligations of the agency, it is necessary to increase their staff. The data that will be entered in this platform should be used by the new MRV platform, in order to avoid unnecessary double data collection from the same entities, and thus to reduce the need for additional capacity.

In the part of Renewable energy sources, with the Energy Law and its bylaws (Rulebook on Renewable energy sources, Decree on support for the production of electricity from renewable sources, Decision on installed capacity for production of electricity from RES) a transposition was made of Directive 2009/28/EC on RES. As in the case of EE, the provisions of this Law have been translated into appropriate RES measures in the Energy Strategy, and thus in the Enhanced NDC, TBUR, NECP. What remains to be transposed from the Directive is the part on biofuels which will be an integral part of the new Law on Biofuels which is being drafted.

Every two years, the Ministry of Economy prepared a Progress Report on the Promotion and Use of Energy from Renewable Sources, which will now be replaced by the bi-annual NECP reports. The capacity established in that part can be used in the process of entering RES data in the MRV platform.

Given that several engineers have left the Ministry of Economy, what is missing is an increase in capacity who will be in charge of monitoring the implementation of RES measures.

In relation to the EE and RES, administrative capacity will be needed to implement the following:

- Monitoring, verification of the data that will be entered in the MVP platform, execution of appropriate changes, communication with the entities that enter information
- Coordination of MVP and MRV platforms
- Monitoring the implementation of RES measures
- Input of RES data in the MRV platform
- Coordination and monitoring of the implementation of the projects that will be defined in the new Program for realization of the energy strategy, which is expected to be ready in 2021 (and is based on all strategic documents such as the Energy Strategy, Enhanced NDC, NECP, TBUR) by the Ministry of Economy and the Energy Agency

### 3.1.7 Carbon capture and storage

Requirements: The **relevant EU legislation** related to the Carbon capture and storage is the following:

- Directive 2009/31/EC on the geological storage of carbon dioxide
- 23/1/2008 - Impact assessment of the Commission's proposal for a Directive on CCS
- Factsheet: Ensuring safe use of Carbon Capture and Storage in Europe

Carbon Capture and Storage Directive 2009/31/EC is not mandatory for the EU Member States.

National context: According to the national Strategy for Energy Development (adopted by the Government) there is no plan to open new coal-fired power plants, so there is also no plan for Carbon Capture and Storage. Based on this, analysis for institutional capacity for implementation of this Directive is not needed.

### 3.1.8 Ozone layer

Requirements: The **relevant EU legislation** related to the Ozone regulation is the following:

- Regulation (EC) 1005/2009 on Substances that Deplete the Ozone Layer

This Ozone Regulation provides legal basis for the protection of the ozone layer within EU and it has two objectives:

- To fulfil the obligations of the Montreal Protocol on substances that deplete the ozone layer, to which the EU and all of its Member States are parties.
- To ensure a higher level of ambition in the EU than required by the Protocol, in areas where this is technically and economically feasible.

Under the landmark Montreal Protocol on Substances that Deplete the Ozone Layer, all countries in the world are taking specific, time-targeted actions to reduce and eliminate their production and consumption of man-made chemicals that destroy the stratospheric ozone layer, Earth's protective shield. UN Environment Programme (UNEP) became an Implementing Agency of the Protocol's Multilateral Fund on 19 June 1991, and it was given this clearinghouse mandate.

National context: Since that date, UNEP OzonAction has been strengthening the capacity of governments - particularly the operational focal points for the Montreal Protocol, known as National Ozone Units (NOUs) - and industry in developing countries to elaborate and enforce the policies required to implement the Protocol and to make informed decisions about alternative technologies. One of the core services to the developing countries of the OzonAction is the creation of Regional Networks of Ozone Officers. As part of this network, the Office for Protection of the Ozone Layer in North Macedonia has been established, which is a project unit within the Ministry of Environment and Physical Planning. Being classified as Annex 5 country under the Montreal Protocol, North

Macedonia receives international support and follows a less stringent phase-out schedule for the ODS consumption than the EU, where the ozone depleting substances (ODS) phase-out is completed. However, ODS consumption in North Macedonia has declined tremendously and remained well below 1 ODP ton since 2011.

In terms of national legislation, the establishment of a legal basis for the management of ozone-depleting substances began with the ratification of the Vienna Convention for the Protection of the Ozone Layer and the Montreal Protocol on Ozone-Depleting Substances and the Additional Ratification of the Amendments. By harmonizing national legislation with the provisions of the Montreal Protocol, Regulation (EC) No 2037/2000 (superseded by Regulation (EC) No 1005/2009) and Regulation (EC) No 842/2006 (superseded by Regulation (EC)) No. 517/2014) the adoption of the amendments to the Law on Environment has started. Legal issues within the Law on Environment (Official Gazette of the Republic of Macedonia no. 53/05, 81/05, 24/07, 159/08, 83/09, 48/10, 124/10, 51/11, 123 / 12, 93/13, 42/14, 129/15, 192/15, 39/16 and 99/18) regarding the management of ozone depleting substances and refrigerants are generally incorporated into two separate articles, Article 22 -a and 22-b. The legal framework in the field of refrigerants in Macedonia can be divided into four parts[6]: 1. Legislation for reduction and elimination of ozone depleting substances; 2. Legislation on ozone depleting substances / refrigerants and equipment containing refrigerants; 3. Legislation related to leakage control; 4. Legislation for adequate establishment of a system for licensing and certification of refrigeration equipment repairers.

The Office for Protection of the Ozone Layer in North Macedonia has been responsible for monitoring, implementation of the legislation related to Protection of the Ozone Layer, as well as conducting trainings, issuing manuals for control of the ozone depleting substances. Therefore, currently there is no need for additional capacity related to implementation of the Ozone Layer legislation (**TBC**).

With the ratification of the Kigali Amendment to the Montreal Protocol, North Macedonia also committed to phase-down its HFC consumption. As HFCs are not ODS, but fluorinated greenhouse gases, they are dealt with in the next chapter.

### 3.1.9 Fluorinated greenhouse gases (F-gasses)

Requirements: The **relevant EU legislation** related to the F-gasses is the following:

- 16/04/2014 - Regulation (EU) No 517/2014 of the European Parliament and of the Council on fluorinated greenhouse gases and repealing Regulation (EC) No 842/2006

F-gases are often used as substitutes for ozone-depleting substances, because they do not damage the atmospheric ozone layer. However, F-gases are powerful greenhouse gases, with a global warming effect up to 23 000 times greater than carbon dioxide (CO2), and their emissions are rising strongly. Hydrofluorocarbons (HFCs) are by far the most relevant F-gas group from a climate perspective, although they are relatively short-lived. The other two F-gas groups, perfluorocarbons (PFCs) and sulphur hexafluoride (SF6), can remain in the atmosphere for thousands of years.

The Kigali Amendment to the Montreal Protocol establishes a phase-down schedule for HFCs, measured in GWP weighted tons relative to a defined baseline.

The current Regulation strengthened the previous measures and introduced far-reaching changes by:

- Limiting the total amount of the most important F-gases that can be sold in the EU from 2015 onwards and phasing them down in steps to one-fifth of 2014 sales in 2030. This will be the main driver of the move towards more climate-friendly technologies;
- Banning the use of F-gases in many new types of equipment where less harmful alternatives are widely available, such as fridges in homes or supermarkets, air conditioning and foams and aerosols;

[6] http://ozoneunit.mk/PDF/Priracnici/Priracnik_2020.pdf

- Preventing emissions of F-gases from existing equipment by requiring checks, proper servicing and recovery of the gases at the end of the equipment's life performed by certified technical personnel.

National context: North Macedonia is following the schedule of the Kigali Amendment to the Montreal Protocol, for Annex 5 countries, starting with a freeze in 2024 of the HFCs and ending with a permanent 80% reduction in 2045, while the EU has already started with a 10% reduction in 2019, getting to the 80% reduction in 2036. The EU F-gas regulation is designed to implement the phase-down schedule, possibly requiring some additional measures after 2030.

Following the EU Climate Acquis, North Macedonia is required to ensure that all entities using F-gases report their activities, especially if it entails placing them on the market. Further requirements are the set-up of adequate training and certification schemes for technical personnel working with F-gases and the provision of a framework for the documentation of activities on F-gas containing equipment including regular checks if the provisions are adhered to.

However, it is important to note that the current strategic documents do not include measures for reduction of the F-gasses explicitly. Therefore, it is recommended that a detailed study on the analysis of this section is made, including a list of concrete policies and measures that should be implemented in order to achieve the HFCs reduction according to the Kigali Amendment.

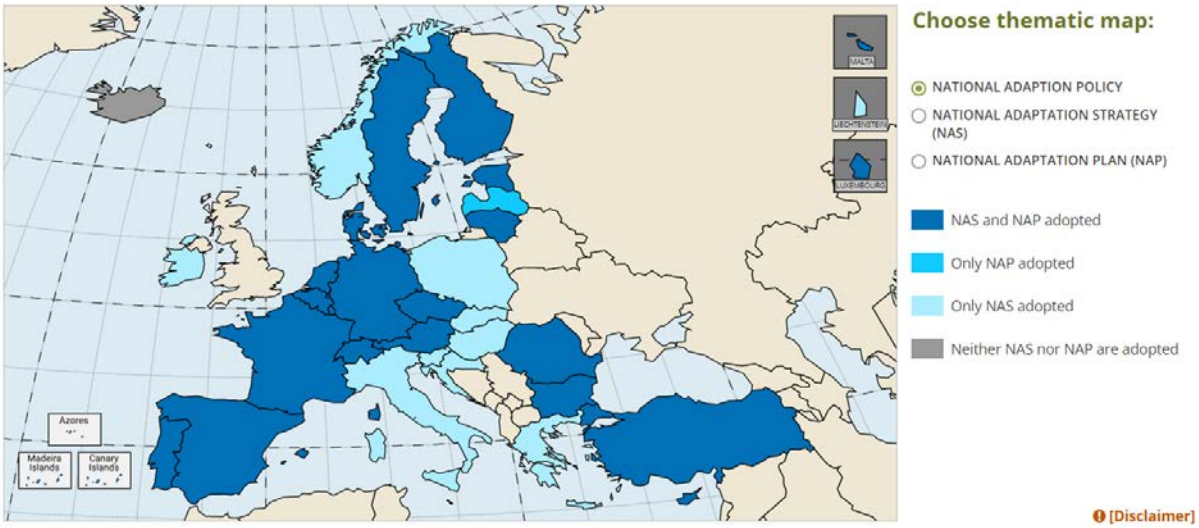
### 3.1.10 Adaptation

Requirements: The **relevant EU documents** related to the Adaptation are the following:

- 16/04/2013 - COM (2013) 216 - An EU Strategy on adaptation to climate change
- COM(2018) 738 - Report on the implementation of the EU Adaptation Strategy
- Regulation 2018/1999 EU- Regulation on the Governance of the Energy Union and Climate Action

In 2013, the European Commission adopted an EU Strategy on Adaptation to Climate Change, which aims to make Europe more resilient to climate change. This Strategy defines actions to be taken by the Member States, where according to the first action "The Commission encourages all Member States to adopt comprehensive adaptation strategies and provides funding to help them build up their adaptation capacities and take action." Based on that, almost all EU Member States have adopted National Adaptation Strategy (Figure 3).

*Figure 3. Map of EU countries that have developed National Adaptation Strategies and/or National Adaptation Plan*




*Source: https://climate-adapt.eea.europa.eu/countries-regions/countries*

Additionally, as part of the European Green Deal, it is planned that the Commission will present a new Strategy on Adaptation, in early 2021, which will be based on the existing Strategy from 2013, as well as its positive evaluation made in 2018 (Report on the implementation of the EU Adaptation Strategy).

It should also be noted that according to the Regulation on the Governance of the Energy Union (2018/1999), Long-term strategies should include an adaptation section, which should be consistent with the reporting in the National Energy and Climate Plans.

In addition, as part of the reporting to the UNFCCC, is the preparation of a special document - National Adaptation Plan (NAP). The preparation of this plan is optional for the developing countries, but it is very useful. The NAP process is meant to help the countries reduce their vulnerability to climate change impacts through effective adaptation planning and aims at addressing the adaptation issue in detail. Additionally, within the other documents reported to UNFCCC, such as the National Communication and the Biennial Update Report, as an integral part there are also sections specially devoted to adaptation.

National context: In Macedonia, neither National Adaptation Strategy nor National Adaptation Plan has been developed so far. However, an analysis of the adaptation measures has been made in several strategic documents, such as:

- 3rd National Communication, 2014
- 3rd Biennial Update Report, draft version, 2020
- Long-term Strategy on Climate Action, draft version, 2020

According to these documents, as well as the EU strategic documents, the adaptation measures are mainly aimed at dealing with:

- High temperature
- Water availability
- Floods, droughts, landslides

In general, these three aspects have an effect on a number of sectors, but mostly on water resources, forestry, agriculture, biodiversity and health. Unlike the measures proposed in the section on climate change mitigation, in the adaptation section, the measures are more general. One of the main actions proposed in most of the already developed documents that address the adaptation issue is the development of a detailed National Adaptation Plan. NAP proposal for Green Climate Fund is under development with UNDP support. The project should start in 2021, and have the NAP by 2024. Governmental focal point for this is the Cabinet of the deputy prime minister for economic affairs.

Based on all this, the main tasks that will require capacity in the area of adaptation are the following:

- Development and adoption of National Adaptation Strategy
- Development of National Adaptation Plan

Based on these documents, where the adaptation measures that Macedonia will follow will be defined precisely and in details, it is recommended that the necessary capacity for their implementation be properly analyzed. Having in mind that in the respective Ministries, there is already a built capacity (sectors/departments), which already directly or indirectly deals with the problem of adaptation, in the future, in accordance with the measures defined in the strategic documents (NAS and NAP), it will be necessary to further specify the work responsibilities so that adaptation will become an integral part of their activities.

## 3.2 Review on key reporting UNFCCC requirements, including Paris Agreement

Requirements: The United Nations Framework Convention on Climate Change (UNFCCC) provides the foundation for intergovernmental action to combat climate change and its impacts on humanity and ecosystems. The ultimate objective of the Convention and any related legal instruments that the Conference of the Parties may adopt is to achieve stabilization of GHG concentrations in the

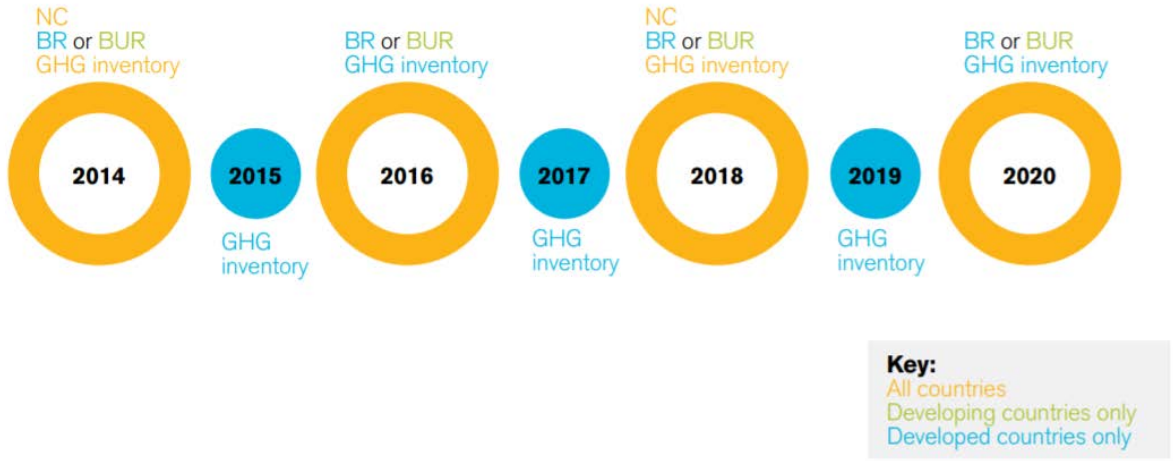
atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system within a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner.

The existing reporting requirements are the following:

- National Communication (NCs)
  - NCs provide information on GHG inventories, measures to mitigate and to facilitate adequate adaptation to climate change, and any other information that the Party considers relevant to the achievement of the objective of the Convention. NCs are submitted **every four years**. The core elements of NCs include relevant information on national circumstances, GHG inventories, a vulnerability and adaptation assessment, mitigation assessment, financial resources and transfer of technology, and education, training and public awareness.
- Nationally Determined Contributions (NDCs)
  - Under the Paris Agreement which is an agreement within the United Nations Framework Convention on Climate Change (UNFCCC) adopted in 2015, each country chooses its own targets or the measures it wants to implement. It outlines these in its Nationally Determined Contributions (NDC) - essentially a summary of its commitments under the Paris Agreement — which it has to submit every five years.
- Biennial Reports/Biennial Update Report (BR/BURs)
  - BRs/BURs provide an update of the information presented in NCs, in particular on national GHG inventories, mitigation actions, constraints and gaps, including support needed and received. BRs/BURs are submitted every two years as a summary of their NC or a stand-alone report. The core elements of BURs from non-Annex I Parties include an update on their national GHG inventories, information on mitigation actions taken and their effects, and an outline of their needs and support received. However, the reporting of the BR/BUR under the Convention will be superseded by reporting of the biennial transparency report (BTR) for PA Parties (explained in the next bullet point)
- Biennial Transparency Reports
  - Article 13 of the Paris Agreement (PA) articulates an "enhanced transparency framework (ETF) for action and support" that establishes harmonized monitoring, reporting, and verification (MRV) requirements. Accordingly, every country needs to report on measures it outlines in its **NDC**. Thus, both **developed and developing nations must report every two years** on their mitigation efforts, and all parties will be subject to both technical and peer review.
  - The Katowice conference (COP24, Dec. 2018) fleshed out a framework that is applicable to all countries by adopting a detailed set of modalities, procedures and guidelines (MPGs) that make it operational. The MPGs are based on a set of guiding principles and define the reporting information to be provided, the technical expert review, transitional arrangements, and a facilitative multilateral consideration of progress. The MPGs will supersede reporting of biennial reports (BRs) and biennial update reports (BURs). In fact, reporting of the BR/BUR under the Convention will be superseded by reporting of the biennial transparency report (BTR) for PA Parties.
- GHG inventory
  - GHG inventories include estimates of all emissions and removals of greenhouse gases (GHG) from given sources or sinks from a defined region in a specific period of time (as a separated document or as part of the national communication and biennial reports)

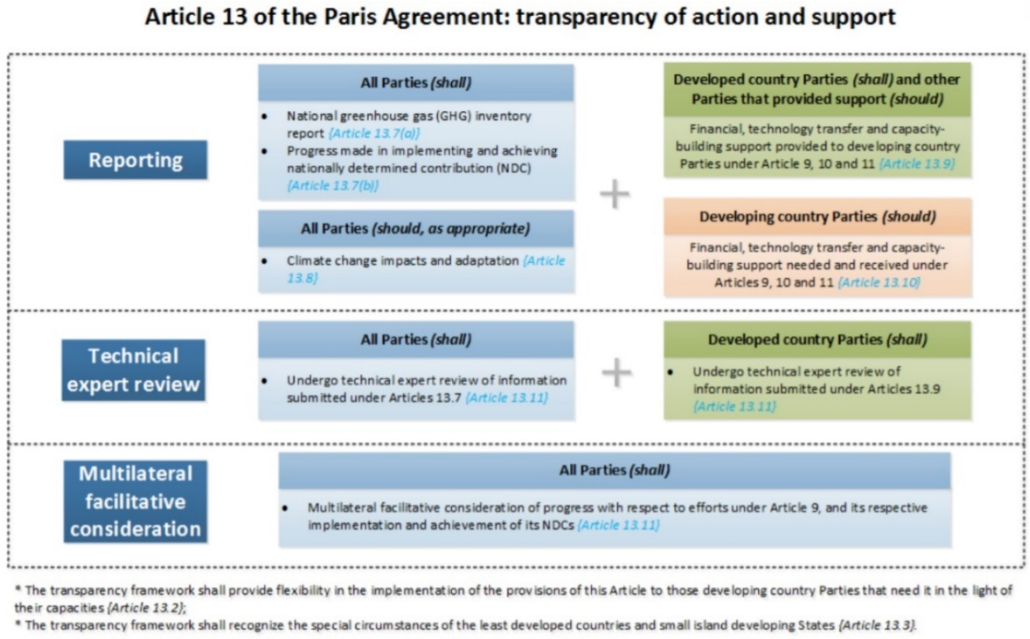
Figure 4 represents the timeline for developed and developing countries for the reporting needs under UNFCCC up to 2020. It can be concluded that the developed countries should develop a GHG inventory each year. Additionally, the developing countries are encouraged to submit National Communications every four years, but it is not required as for the developed countries. Furthermore, the guidelines for the preparation of the NC and BUR for the developing countries are less stringent.

*Figure 4. Timeline for reporting under the existing transparency system (UNFCCC) up to 2020*[7]




However, as previously stated, under the Enhanced Transparency Framework (Figure 5), BRs/BURs are superseded by reporting of the biennial transparency report (BTR) for PA Parties. Through the detailed guidance on the reporting/review/consideration processes for the information to be submitted and by making these reports publicly available, the ETF will make it possible to track the progress made by each country. In this way, it will be possible to compare a country's actions against its plans and ambitions as described in its Nationally Determined Contributions (NDCs).

*Figure 5. Enhanced Transparency report*[8]




[7] A guide to transparency under the UNFCCC and the Paris Agreement

[8] file:///C:/Users/akane/Downloads/undp-ndcsp-Gender-Webinar-Mainstreaming-MRV%20(3).pdf

It should be noted that, an **NDC is not subject to review under the ETF**. Additionally, the MPGs **do not replace the NC reporting guidelines** for Annex I and non-Annex I Parties under the Convention.

It should be noted that the final BR by developed countries is to be submitted as early as the due date for the annual GHG inventory in 2022 (15 April 2022), but no later than 31 December 2022, and the **final BURs by developing countries** shall be those that are submitted **no later than 31 December 2024**. Additionally, the first BTR must be submitted by all Parties **no later than 31 December 2024.**

Furthermore, in order to have a closer co-operation between the Convention secretariat and Parties and for improvement in their communications, the Convention secretariat developed a network of different Focal Points (NFP) for activities pertaining to the United Nations Framework Convention on Climate Change (UNFCCC):

- National Focal Points of Parties to the UNFCCC
  - Pursuant to decisions taken by the Subsidiary Body for Implementation, the Subsidiary Body for Scientific and Technological Advice and the Conference of the Parties (Documents FCCC/SBI/1996/9, para. 29, FCCC/SBSTA/1996/8, para. 74 and decision 14/CP.2), the Convention secretariat developed a network of National Focal Points (NFP) for activities pertaining to the United Nations Framework Convention on Climate Change (UNFCCC).
- National Gender & Climate Change Focal Points
  - The gender and climate change decision 3/CP.25, paragraph 11 "Encourages Parties to appoint and provide support for a national gender and climate change focal point for climate negotiations, implementation and monitoring"
- Loss and damage contact points
  - COP 22 invited interested Parties to establish a loss and damage contact point through their respective UNFCCC national focal point, with a view to enhancing the implementation of approaches to address loss and damage associated with the adverse impacts of climate change at the national level.
- National Designated Entity as a focal point for the UNFCCC technology mechanism
  - Established in 2010, the Technology Mechanism plays a central role in facilitating support to developing countries on climate technology development and transfer. This includes support for countries to implement their nationally determined contributions.
- CBIT focal point
  - Capacity-building Initiative for Transparency (CBIT) was created at the request of Parties to help strengthen the institutional and technical capacities of non-Annex I countries to meet the enhanced transparency requirements defined in Article 13 of the Paris Agreement (https://www.cbitplatform.org/).

National context: As previously stated, the Republic of North Macedonia is a non-Annex I party to the UNFCCC and has signed in 2015 and ratified in January 2018 the Paris Agreement. As a non-Annex I party, North Macedonia does not have quantified commitments. Despite this fact, it is voluntarily attempting to incorporate Annex I principles as much as possible. The reports which Northa Macedonia has prepared by now are presented in Figure 6, and include three National Communications, three BURs and two NDC. In each of these years GHG Inventory was also developed. Until now all of these documents were prepared by MANU RCESD, the Institute of Agriculture, Faculty of Agricultural Science and Food, Hans Em Faculty of Forest Sciences, Landscape Architecture and Environmental Engineering and additional experts.

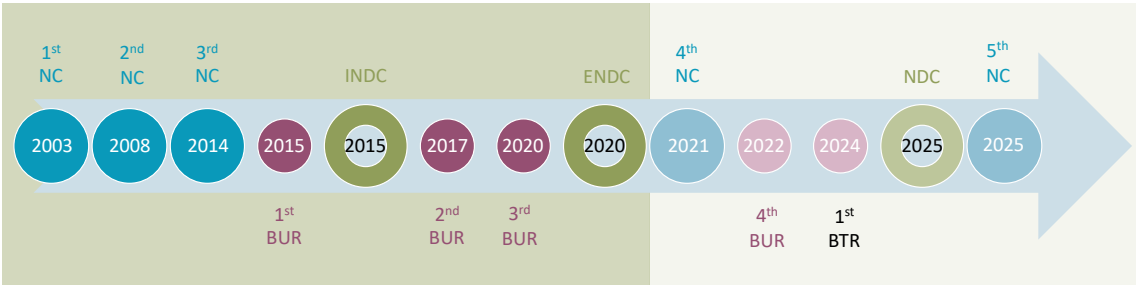
In the future, at least the following documents should be prepared (as presented in Figure 6),

- 4th National Communication – 2021
- First BTR should be developed by 2024

- The following NDC should be prepared in 2025

Additionally, GHG Inventory should be prepared as part of these documents, and/or after becoming EU member or Annex I country, it should be prepared each year.

*Figure 6. Timeline for reporting under UNFCCC, including Paris Agreement for North Macedonia*




In terms of focal points in North Macedonia, currently the situation is the following:

- National Focal Points of Parties to the UNFCCC - Ms. Teodora Obradovikj Grncharovska, State Counselor on Climate Change, MoEPP
- National Gender & Climate Change Focal Points - Ms Elena Grozdanova, Ministry of Labour and Social Policy
- Loss and damage contact points – there is no focal point yet.
- National Designated Entity as a focal point for the UNFCCC technology mechanism – no focal point yet
- CBIT focal point - Ms. Ana Petrovska, State Secretary in the Ministry of Environment and Physical Planning

# 4 Overview and Findings on current institution capacities

## 4.1 General overview and findings

The aim of this section is to provide as detailed overview as possible of the division of responsibilities and coordination of processes among various public institutions in North Macedonia in regards to the tasks stemming from the international binding documents elaborated in the previous section. This section also serves as an introduction to the following ones, in which the administrative capacity needed per climate change process and of each key institution is provided.

Responsibilities with regard to climate action have been established in the Government of North Macedonia (GoNM), with the MoEPP as the main institution responsible for policies, legislation preparation, planning, regulatory action, and reporting on climate situation and climate action. As climate action is cross-sectoral, it is the normal and usual situation that responsibilities are divided in government and allocated to various administrations. Cross-sectoral tasks, however, make coordination and cooperation crucial. Especially, coordination between ministries requires a coordination body. With the National Committee on Climate Change (NCCC), a coordination body of this kind exists. However, in the draft version of the Law on Climate Action it is stipulated that a National Climate Change Council should be established, which shall provide high-level support and guidance for the overall climate action in the country as well as to contribute to the integration of climate action in sectoral policies, plans and measures".

As recognized by the most recent ECE Environmental Performance Review: "While the existence of an interministerial advisory body on climate change issues is positive, participating ministries tend not to have units or departments dedicated to climate change; this translates into limited capacities, which can raise questions regarding the effectiveness of this mechanism." Generally, most of the relevant institutions are given mandates for climate actions meaning that they have responsibilities and tasks. However, they lack the adequate specific structures and most of all, they lack the adequate resources in terms of sufficient and qualified staff. This aspect is dealt with in chapter 5 below in more details.

Climate action requires scientific expertise to a high extent. It must be ensured that such scientific expertise is available to political and administrative decision-makers, be it within the institutions or outside the institutions with mechanisms for utilizing the outside expertise as a source. MANU, in particular through its Research Center for Energy and Sustainable Development (RCESD) together with the Institute of Agriculture, Faculty of Agricultural Science and Food and Hans Em Faculty of Forest Sciences, Landscape Architecture and Environmental Engineering, have the required scientific expertise; in the past, they have been engaged in the development of GHG inventories, development of mitigation assessment and modelling. This engagement, however, has mostly been project-based, with financial support from GEF and in the framework in the reporting to the UNFCCC. This points at the fact that financial means for in-house or external expertise were not sufficiently available in the past.

## 4.2 Ministry of Environment and Physical Planning (MoEPP)

### 4.2.1 Main responsibilities related to climate action

The key and leading institution for climate action is the Ministry of Environment and Physical Planning. It is the National Designated Entity for UNFCCC and for the CDM, as well as the key governmental body responsible for policymaking with regard to climate change issues. The Ministry is also identified as the main institution responsible for coordinating inter-institutional cooperation for the preparation of the national plans on climate change and climate action plans. The Ministry is also responsible for the process of preparation of the GHG inventories and reporting obligations towards the UNFCCC including the Paris Agreement.

### 4.2.2 Internal organization and posts related to climate action

For climate changes, the Rulebook on Internal Organization foresees:

1) One State Advisor on Climate Change (functional/engaged)
2) In the **Sector for Sustainable Development and Investments:**
   - Unit for Sustainable Development
   - Unit for Investments
   - **Unit for Climate Change Policies (not functional, stated on paper, but positions are not filled)** with main function to create policies and implement projects in the field of climate change through:
     - ✓ Development, planning and creation in the field of climate change and sustainable development
     - ✓ Preparation and implementation of planning documents, operational programs and projects
     - ✓ Interdepartmental and intersectoral cooperation with other bodies in the country and abroad
     - ✓ Preparation of draft laws in the field of climate change
     - ✓ Implementation of measures actions towards reducing and easing the climate changes in the other sectors policies
     - ✓ Research and analysis of policies, documents and programs at local, national and international level in the field of climate change
     - ✓ Preparation of planning documents in the field of climate change
     - ✓ Implementation of activities for planning and preparation of operational programs - programming in the field of climate change
     - ✓ Analysis of data related to GHG emissions and projections and providing proposals for their reduction
     - ✓ Cooperation with stakeholders in initiating and implementing actions for easing the climate changes.
3) In the Sector – **Macedonian Environment Information Centre** (MEIC):
   - ***Unit for Monitoring of Air Quality*** that performs daily monitoring of the data obtained from the State Automated Monitoring System for ambient air quality and their validation

and verification; regular maintenance and servicing of stations and samplers, change of filters, change of parts, manual calibration of instruments in stations, etc.

- *Unit for Analysis and Reporting* performs tasks related to collection, processing, analysis, display and reporting of data and information from the media and environmental areas. Prepares daily, monthly, annual and four-year reports on the state and trends in the environment and prepares thematic maps with geo-oriented data. The unit cooperates with the European Environment Agency (EEA) and submits data and information to other international organizations, networks and conventions. The unit also develops, implements and expands the national set of indicators, and coordinates the work of working groups for all chapters. The unit submits and processes data and information on the statistical database and statistical yearbook and the needs of other bodies and organizations in the country.
- *Unit for Cadastre and Modeling* prepares and maintains environmental media cadastres as part of a central database, for the purpose of which it develops, distributes and collects questionnaires for pollutants for individual areas, processes data and enters data in individual cadastres in the central database.
- *Unit for Information Technology* provides IT services for all employees of the MoEPP, maintains the information infrastructure of the MoEPP and the National Environmental Information System, provides LAN and WAN services for MoEPP, as well as Internet access, provides firewall network protection and centralized protection against computer viruses, installs newly procured equipment, administers the MoEPP web portal, technical preparation of brochures and reports from processed environmental data.

Related to climate change, MEIC is collecting, processing, and disseminating certain data on quality of air (e.g. PRTR). MEIC is not responsible for preparing the National GHG inventories and other reports required by Regulation (EU) 525/2012. MEIC also does not collect activity data, including data on waste, wastewater, and F-gases.

4) **Other organizational units** that have greater connection to the climate changes are the following:
   - Unit for Law Harmonization and Negotiations within the Sector for European Union,
   - Unit for Legal, Normative and Administrative Affairs within the Sector for Legal and General Affairs,
     drafting of any piece of legislation related to climate changes and /or transposition of the relevant EU legislation must involve staff from these two units;
   - Sector for Industrial Polution and Risk Management wherein the Unit for Chemicals and Industrial Accidents prepares opinions on import/export requirements of certain chemicals, as well as equipment containing hazardous chemicals, and manages certain groups of chemicals ranging from preparation of strategic documents to specific actions for monitoring, control, reduction and elimination of these groups of chemicals;
   - Sector for Waste that is responsible for implementation of priorities in the area of waste arising from strategic and planning documents, as well as ensures a high degree of integrated waste management in the country;
   - Unit for Communication, Public Relations and Education which represents a link between the M E PP and the public. This unit was to great extent involved in the development of the climate change communication strategy, its implementation and development of progress reports and it is also responsible to update the national climate change web platform, and social media accounts related to this subject matter.
   - Sector for Spatial Planning that is important for mainstreaming climate change into Spatial Planning) based on the Methodology for mainstreaming Climate Change consideration into spatial planning with a focus on National Spatial Plan and for implementation of set of

recommendations related to integration of climate change into various spatial and urban planning documents.

### 4.2.3 Systematized posts

The existing Rulebook on Systematization of Posts foresees the following posts directly related to climate change policy issues:

- One State Advisor on Climate Change (filled)
- Posts in the Unit for Climate Change Policies (not filled):
  - Head of Unit (B04)
  - Advisor (C01) for preparation of operational programs and planning documents in the field of climate change (educational background: forestry, environment and industrial engineering)
  - Advisor (C01) for preparation of laws in the field of climate change (educational background: legal studies)
  - Advisor (C01) for RES (educational background: environment, energy and legal studies)
- In addition, various other posts are systematized in different MoEPP sectors and units, which fully, partially or to minor extent perform tasks related to climate change, such as the following:
  - Approximately 5 staff members in MEIC;
  - 1 employee in the Unit for Law Harmonization and Negotiations within the Sector for European Union;
  - Staff in the Unit for Legal, Normative and Administrative Affairs within the Sector for Legal and General Affairs;
  - 3 employees in the Unit for Chemicals and Industrial Accidents; and
  - Staff in the Waste Sector.

### 4.2.4 Donor assistance

MoEPP receives continuous technical and financial support in the field of climate action from:

- UNDP and GEF, currently through Macedonia's Fourth National Communication and Third Biennial Update Report on Climate Change under the UNFCCC Project, the CBIT project and development of the Enhanced NDC. The goal of the CBIT project is to assist the country in mainstreaming and integration of climate change consideration into national and sectorial development policies by providing continuity to the institutional and technical capacity strengthening process.
- EU Sector Operational Programme for Environment and Climate Action 2014-2020, currently through the Preparation of Long-term Strategy and Law on Climate Action Project.

From UNDP projects, special attention is paid to increasing national capacities relevant to climate change. At least 80% of the project funds is spent for national consultants/companies/universities/academia in order to ensure quality of the information and approaches and continuity of the process. In the previous almost 20 years, by fostering a partnership between science and policy-making, academia and universities capacities have been built to facilitate UNFCCC reporting. It is through this donor support that MANU's RCESD, the Institute of Agriculture, Faculty of Agricultural Science and Food and Hans Em Faculty of Forest Sciences, Landscape Architecture and Environmental Engineering has been engaged, having had main role in preparation of the following key climate change documents: Biennial Update Reports, National Communication, GHG inventories, National Energy and Climate Plans and Nationally Determined Contributions. The RCESD has established good cooperation with other institutions and experts that contribute to the development of these documents.

Since 2019, day to day work on climate change is supported by 5 junior associates contracted through CBIT Project, but embedded to the MoEPP. The following is the lists of tasks they perform in accordance to the ToR:

- Support in monitoring the implementation of activities related to the UNFCCC, the Paris Agreement and the obligations arising from accession to the EU (in the field of energy and climate);
- Support in creating conditions for transparent reporting to the UNFCCC and the EU on climate change;
- Improve capacities for regular fulfillment of national and international obligations related to climate change;
- Assist in the preparation of various recommendations / questionnaires / reports related to climate change;
- Support gender inclusion in climate policy at national and local level;
- Assist in creating a list of a national network of experts in the field (relevant persons for MRV in key government institutions, as well as national experts);
- In cooperation with the MRV team in the MoEPP, prepare and conduct briefings for relevant committees, key line ministries, Government, Parliament, municipalities and civil society on Transparency and NDC activities;
- Assist in identifying mitigation, adaptation and reporting tools;
- Help in improving institutional cooperation with the education sector with the aim of introducing climate change in the education system at the institutional level.

*Findings on internal organization and systematized posts*

- The State Advisor on Climate Change position is currently held by a qualified professional with PhD and many years of experience in climate change matters in charge of all aspects of climate action from the FCCC and the EU climate action acquis.
- When developing the Rulebook on Systematization of Posts, MoEPP has made a mistake for the Unit for Climate Changes Policy. Namely, the legal requirements are that at least 5 posts have to be prescribed in order to establish a unit. In this case, the Rulebook foresees Head of Unit and 3 experts' administrative servants, which we believe is a purely technical error.
- Taking into account the type of tasks employees in this Unit should perform, it seems that systemizing 3 posts for the highest level of expert servants (advisors) is not adequate for several reasons. First, it is more difficult to fill in high level posts. Second, many tasks in practice relate to simple and routine processes of collecting and structuring data and communicating with other institutions, which could be performed by inexperienced lower level of experts' administrative servants (junior associate or associate).
- The foreseen 3 experts' administrative servants differ in the names of the posts, tasks prescribed and educational background required. One post is dedicated to prepare operational programs and planning documents, another on drafting laws and bylaws, while the third one on RES and energy efficiency related issues. With a few exceptions, most of the prescribed tasks to be performed by these 3 posts are formulated in very general manner, without indicating the specifics that derive from the climate changes processes. Furthermore, tasks prescribed for the Head of the unit are inherent to the managerial position.
- At the moment, MoEPP has very limited human capacities dedicated to the climate actions. Posts in the Climate Policy Unit are not filled yet, making the State Councillor for Climate Change as the only Ministry staff member directly working on climate change issues. However, UNDP through the CBIT Project has contracted 5 junior associates that work for the MoEPP on climate

changes issues. Formally, each has been appointed to a vacant post in another unit within the MoEPP.

- According to the list of tasks each junior associate has been given, it can be concluded that there is no specialization among them, i.e. each works on the same set of tasks. Still, these tasks are written in more detailed manner reflecting the needs of the climate changes processes, unlike the list of tasks contained in the MoEPP Rulebook on Systematization of Posts. In addition to the prescribed tasks, almost each of them works on additional ones. For some of them, these additional tasks take up to 30% of their working hours.
- With MEIC in place, MoEPP has taken centralized approach in IT matters. Namely, all tasks directly or indirectly related to IT and above all the information systems of MoEPP are administered and maintained through this organizational unit. This implies that any new information system and staff administering it, such as the new envisaged MRV platform, will be suited in MEIC. A proposal for new staff in the MEIC was prepared in 2019 but not adopted yet. This proposal foresees a Senior Associate for the Preparation of GHG Inventory from Industry Sector, and several other positions with tasks related to climate action.

## 4.3 Cabinet of the Deputy Prime Minister responsible for Economic Affairs (CDPMEA)

Cabinet of the Deputy Prime Minister of the Government of Republic of North Macedonia in charge of economic affairs and coordination of economic departments (CDPMEA) is responsible for coordination of the economic departments within the Government and development and monitoring of the process of alignment of the national legislation with the EU acquis, strategic guidelines, policies, reforms, structures to be realized by the country to fulfil the requirements for EU membership, primarily in the economic departments. CDPMEA is strongly supporting the implementation of climate and energy-related projects in the country.

In regard to Climate Action, tasks comprise:

- The coordination of the National Adaptation Plan;
- CDPMEA is the National designated authority to the Green Climate Fund (GCF), as the Deputy President of the Government is focal point to the GCF;
- Coordination of the implementation of the Sustainable Development Goals and is chairing the National Council on Sustainable Development. As part of the 17 goals of the Sustainable development goals and the Agenda 2030, the Cabinet of the Deputy President of the Government in charge of economic affairs is responsible for overall implementation of the Agenda 2030/goal 13 on climate action; and
- As part of the European Community treaty, the CDPMEA is leading the process for development of the New National Strategy for Energy in which The EU's Energy Union strategy which is made up of five dimensions is integrated.

The CDPMEA participates:

- As representative from the office of the Prime minister and the CDPMEA as member and deputy member in the Steering Committee for the Law on Climate Change and the long term strategy on climate;
- As part of the Governance of the energy union the CDPMEA is Part of the working group for development of the Integrated National Energy and Climate Plans (NECPs); and
- As part of the National Climate Change Committee, which is intergovernmental body which supports the implementation of the climate related projects in the country.

CDPMEA Cabinet with the Cabinet of the Prime Minister (both share some human resources) have altogether 3 employees fully devoted to energy, climate change, environment and / or sustainable development issues, where the afore mentioned specific tasks belong to.

## 4.4 Ministry of Economy (MoE)

The MoE is responsible for the energy sector, among other matters, and as such is closely involved with climate-relevant issues. All energy-related matters concerning climate action require coordination and communication with the MoE, be it policies, strategies and legislation.

The MoE competences also cover road transport vehicles (shared responsibility with the MoI) and thus the CO2 emissions from vehicles, especially through the Bureau of Metrology.

The MoE competences include the regulation of Carbon Capture and Storage.

Furthermore, the MoE is also the competent authority for climate related aspects of tourism, including adaptation.

Though on paper MoE has large Energy Sector, including state advisor on energy, with many posts systematized and also filled-in, the capacity of this ministry and especially of the energy sector is not sufficient. Namely, in the last several years, many of the experienced and knowledgeable public servants from this sector left the ministry (some of them even in the public sector), thus weakening the capacities of this policy-making institution to deal with so many responsibilities in the field of energy and climate change. Many of the present staff are only couple of years with the MoE with no prior experience in the energy field or in general, while staff with technical background is lacking.

## 4.5 Energy and Water Services Regulatory Commission (ERC)

The Energy Regulatory Commission commenced its operation in 2003 and is an independent regulatory body that is responsible for:

- safe, secure and quality supply to the energy consumers;
- nature and environment protection;
- consumer protection;
- protection and improvement of the position of those employed in the energy sector; and
- introduction and protection of a competitive energy market on the principles of objectivity, transparency and non-discrimination.

As is the case with all other regulatory bodies in the country, the ERC has sufficient resources (financial and human) to efficiently cope with the prescribed responsibilities. Even though the role of the ERC in climate change monitoring and reporting tasks is peripheral, its data collected though the energy markets monitoring could be well utilized.

## 4.6 Energy Agency (EA)

The mission of the Energy Agency of the Republic of North Macedonia (EA) is to support the implementation of the energy policy of the Government, through the preparation of the energy strategies, development plans and programs, with particular emphasis on energy efficiency (EE) and usage of renewable energy sources (RES).

Based on the Energy Efficiency Law, the EA is responsible body to administer the MVP system as a comprehensive database for recording energy savings from implementation of energy conservation measures by various public entities in the country.

According to the official information dating from December 2019 (unofficially, nothing has changed since then), the EA has a small number of systematized and filled posts, thus being unable to efficiently and effectively respond to the purpose for which it was established and the responsibilities given in the relevant laws, especially the Energy Efficiency Law. Number of systematized posts and employees performing essential functions for which the EA was established is almost equal to the

number of posts and employees who have support function, i.e. 8 systematized and 7 filled jobs for essential versus 7 systematized and 5 filled posts for support function. The number of organizational units through which the essential functions are performed (one unit for RES and EE) is smaller than those for support (Unit for Administrative and Legal Affairs and Unit of Financial Affairs).

The number of employees in the EA has been stagnating for years. Even if new employee comes, the total number of employees does not increase, because it always happens an existing employee to leave. There is an evident shortage of managerial staff. Eventually, the EA has apparent imbalance among the employees in terms of experience, expertise and above all the profile and competencies that they have to meet for certain posts. This especially refers to the staff in the Unit for RES and EE, where there is a very small number of engineering staff that the Agency needs the most, i.e. only two employees with energy and mechanical educational background. An IT person has been missing for some time, which is especially necessary considering the information systems that (should) be administered by the EA or those that will be further developed and put into operation.

## 4.7 Ministry of Agriculture, Forestry and Water Economy (MoAFWE)

In the climate change terms, MoAFWE plays a key role in the area of Forestry, as this sector is the only one with GHG sinks. Under the Law on Forests, MoAFWE is responsible for overseeing the sustainable management, planning, management and preservation of forests and forest land in a manner and to an extent that permanently maintains and enhances their productive capacity, biodiversity, regenerative capacity and vitality, in interest of the economic, ecological and social functions of the forest.

On the other hand, the Agriculture sector is one of the most vulnerable sectors to the extreme conditions and disasters that result from climate change. MoAFWE has a central role in policy making in order for Agriculture to adapt to emerging conditions, i.e. to adapt to climate change. Additionally, water resources are also one of the key aspects of adaptation, where this Ministry has a responsibility, especially through A.D. Water Economy of the Republic of North Macedonia to provide sufficient quantities of water for irrigation.

The important role that this Ministry has in climate change can be confirmed by the conclusions from the last conducted Functional Review, which shows that there should be a separate sector for climate change within this Ministry.

## 4.8 Ministry of Transport and Communication (MoTC)

Energy efficiency, through the renovation of existing buildings and the construction of new ones in the public and private sectors, is one of the main measures to reduce energy consumption, and thus mitigate climate change. MoTC is responsible for establishing standards during construction, i.e. reconstruction of buildings, defined in the Law on Construction.

Road freight transport significantly participates in the energy consumption of the Transport sector, and according to the latest analysis of the Energy Strategy until 2040, it is planned the tonne kilometers to increase by more than three times. According to the Law on Vehicles and the Law on Road Transport, MoTC has a significant role in the freight transport sector.

As far as adaptation is concerned, its competences may be relevant for aspects of resilient infrastructure and land use planning.

## 4.9 Civil Aviation Agency (CAA)

One of the most important CAA responsibilities is the regulating and establishment of the National Aviation Legal System for all the aviation areas. When it comes to the climate change aspects, the CAA is volountrary participating in the UN Carbon Offsetting Scheme for International Aviation (CORSIA), which is an international mechanism very similar to the EU ETS.

## 4.10 Ministry of Finance (MoF)

The measures for mitigation (and probably for adaptation) of climate change envisage a certain part of the measures, especially in the part of reconstruction of public buildings and subsidies to be financed from the central budget. Strengthening the administrative capacities on climate change by employing new staff or promoting the present one within MoEPP and other institutions depends on the formal consent that MoF should provide. If implementation of an activity that contributes to climate action entails funds from the state budget, then it has to be approved by MoF as well. So, in all these processes, the MoF has decisive role. In addition, this Ministry would play a crucial role in introducing the carbon price. MoF is also in charge of the Law on Vehicle Tax, which includes the aspect of climate change (CO2 emissions/km) in the equation that determines the vehicle tax.

## 4.11 Ministry of Health (MoH)

The Ministry, and within the Ministry, the Institute for Public Health, is in charge of all aspects related to the impacts of climate change on human health. It has a major role to play with regard to measures of adaptation to climate change, namely the implementation of the Climate Change Health Adaptation Strategy and Action Plan of Macedonia (2011).

Within the Ministry of Health, the Commission for Monitoring Heat Health Consequences has been functional since 2007 and the Committee on Climate Change and Health has been functional since 2009.

## 4.12 Ministry of Interior (MoI)

MoI is responsible for management of a vehicle registry, which is important part for monitoring and reporting of the implementation of some of the measures for climate change mitigation in the Transport sector.

## 4.13 Ministry of Labour and Social Policy

This Ministry is responsible for taking into account the gender equality and the social inclusion in climate change. This is especially important because the introduction of the climate change mitigation measures could lead to higher energy prices, so particular attention should be made to vulnerable customers.

## 4.14 Secretariat for European Affairs (SEA)

SEA is a governmental institution responsible for horizontal management and coordination of the EU integration process. In this regards, SEA is responsible for horizontal coordination and management of the process of alignment of the national legislation with the EU acquis, strategic guidelines, policies, reforms, structures to be realized by the country to fulfil the requirements for EU membership. In order to achieve the above mentioned, SEA together with the line ministries, is responsible for programming of the National Programme for approximation with the EU acquis (NPAA), which also covers the chapters Environment and climate change.

## 4.15 Crisis Management Centre (CMC)

One of the climate change mitigation measures is to reduce the number of fires, which is very important for maintaining the level of GHG sinks in the Forestry sector. The role of this Center is seen from this aspect, which will help in reducing the number of forest fires with early detection and prevention. Therefore, in the future this Crisis Management Centre could be the UNFCCC loss and damage focal point.

## 4.16 Fund for Innovation and Technology Development

The Fund for Innovation and Technology Development was established in December, 2013, with the aim of encouraging innovation by providing additional resources to finance innovation, in view of the need to build a competitive economy based on knowledge. In terms of climate change, accelerating and enhancing climate technology development and transfer is an essential element for achieving the ambitions mitigation and adaptation targets. Therefore, the Fund for Innovation and Technology Development is suitable to be nominated as National Designated Entity - a focal point for the UNFCCC technology mechanism.

## 4.17 Macedonian Academy of Sciences and Arts (MANU)

Macedonian Academy of Sciences and Arts (MANU), the highest scientific institution in the country, plays a central role in the national energy planning and related fields of vital national importance. In cooperation with the other stakeholders in the energy sector, MANU prepares the National Energy Strategies, National Strategy for Renewable Energy Sources, National Strategy for Sustainable Development (responsible for the sector energy) and the Programs for realization of the Energy Strategies. The development of these strategies required well-established and long-lasting partnerships with the key national energy stakeholders, including also policy makers, local authorities, energy companies and SMEs.

Through its RCESD, MANU has been active in the field of Climate Change for more than a decade. The main activities include preparation of the National Inventory of GHG Emissions and Mitigation Analyses for the purpose of the National Communications under the UNFCCC and Biennial Update Reports, analytical support of the NDCs. As national focal point of the Intergovernmental Panel on Climate Change (IPCC), RCESD-MANU is also involved in the international Climate Change related research activities, contributing to the work on mitigation analyses from perspective of developing and economies in transition countries.

RCESD-MANU has a vast energy-related knowledge and is the steward of the MARKAL-Macedonia model for energy planning.

## 4.18 Hydro-Meteorological Service (HMS)

The HMS is a legal entity within the MoAFWE. The main role of this institution is seen primarily in providing data needed to plan energy needs.

## 4.19 State statistical office

The State Statistical Office is specialised and independent organisation within the state administration in the Republic of North Macedonia. The basic functions of the institution are collecting, processing and disseminating statistical data about the demographic, social and economic situation of the Macedonian society. In terms of climate change, the SSO collects the most important data for the Energy sector, which are used for the developemnt of the GHG Inventory, as well as the other strategic documents. According to the Annual implementation report of the EnC, Macedonian State Statistical Office (SSO) in the energy field is one of the best in the region. Implementation in the statistics sector of Macedonia is almost completed (98%).

Additionally, a large set of other environmental indicators are published which show the quality of the environmental media (water, air, soil), the environmental problems (depletion of the ozone layer and climate changes, environmental protection and loss of bio-diversity, waste production and management) and the sector policy making (indicators related to agriculture, forestry, tourism and environmental protection policy instruments).

## 4.20 Ministry of Culture (MoC)

The MoC is the entity responsible for the protection of cultural heritage from climate change impacts, through the definition and implementation of adaptation measures.

## 4.21 National Climate Change Committee (NCCC)

The NCCC was established by the Government, with the purpose of providing a high-level support for the development and implementation of climate change activities. It consists of representatives nominated by key stakeholders from national institutions, academic institutions, the private sector and civil society, and climate change coordinators designated by ministries.

As previously stated, in the draft version of the Law on Climate Action it is stipulated that a National Climate Change Council should be established. According to the draft Law, this council shell be established as "an advisory body, which shall provide high-level support and guidance for the overall climate action in the country as well as to contribute to the integration of climate action in sectoral policies, plans and measures". However, in the current version there are two options for the members of this council, the first one including only ministers of the Go NM, and the other option includes 15 members who are appointed by the GoNM, which besides representatives from state bodies, also including academic institutions, Economic Chamber of Macedonia, Association of the units of local self-government, non-governmental organisations.

# 5 Administrative capacity requirements per climate change process

## 5.1 Introduction

Based on the assessment and elaboration of the requirements stemming from relevant UN, EnC and EU documents related to climate change, which are given in chapter 4 of this report, as well as the assessment of the present administrative capacities given in chapter 5 of this report, it can be concluded that strengthening administrative capacity of several public institutions, above all MoEPP, would be needed to fulfill the obligations for monitoring, reporting and verification towards EU, EnC and UNFCCC. It should be highlighted that all these are closely intersected and that most productive solutions is to have administrative capacities that can support joint reporting. Main activities (preparation of documents) related to climate change that entail strengthened administrative capacity are given bellow with estimation of the number of human resources needed, while the next chapter goes further by providing the title of the posts, educational background and scope of work (list of tasks) for the post, accompanied with financial roadmap.

## 5.2 Administrative capacity needed for GHG Inventory

GHG Inventory is to be developed annually and it will be reported to both – EU and UNFCCC, making it the most demanding climate change activity in terms of persons involved on continuous basis. Until now all national inventories, except for one, were prepared by MANU RCESD, the Institute of Agriculture, Faculty of Agricultural Science and Food and Hans Em Faculty of Forest Sciences, Landscape Architecture and Environmental Engineering, and were project based. Around 10 persons with extensive experience in the field and profound knowledge in the methodology and manner of data collecting were dedicated to the development process, but on part-time basis. It is important to mention that although these group of experts came from different institutions had excellent cooperation and complemented each other, which contributed the working process to be efficient. It needs to be taken into account that UNDP also gathered a team comprised of three persons that worked for almost a year on full-time basis to prepare the GHG inventory.

It should be stressed that the GHG inventories are developed with high quality and by introducing appropriate QA/QC procedures. Four persons from Macedonia became UNFCCC certified reviewers, two are going through the process, and two more will start the training this year.

The Draft Law on Climate Action allocates this obligation to the MoEPP without specifying further the type of experts, number of staff or organizational unit that should work on it. Comparative experiences from the countries in the region and EU are different:

- The inventory to be prepared by a state institution (Agency for Environmental Protection), such as in Serbia - Serbian environmental protection agency, Montenegro - Nature and environmental protection agency, but also by European countries (Slovenia - Environment Protection Agency , Germany - Environmental Agency - Umweltbundesamt).
- But there are also other experiences in the region, such as the example of Croatia, where the Environmental Protection Agency has the authority to select the Authority for the preparation of the GHG Inventory[9]. For a long time, the inventory of Croatia is made by EKONERG, which is a company specialized in making Inventories, but also have a wide portfolio of activities in the field of climate change.

Based on this, there are two options on how the GHG inventories could be developed in terms of type and number of persons and entities involved:

[9] http://faolex.fao.org/docs/texts/cro130265.doc

- To internalize the process to the fullest possible extent, i.e. MoEPP to establish internal unit and/or employ four persons to develop the GHG inventory, while the external expert assistance to be reduced to a minimum, or
- Engage external entity or group of experts to develop the GHG inventory, which the MoEPP can select by conducting public procurement procedure or by concluding long-term cooperation agreement with public institution(s) that has the needed experience and capacity.

Each option has its pros and cons. Heavily relying on external assistance does not contribute towards building the internal administrative capacities, which is a main objective. Applying appropriate administrative arrangement to engage the external entities (tender or long-term cooperation agreement among public institutions or donor supported) might also be faced with uncertainties and be time demanding. Completely internalizing the process is not possible due to the fact that public sector could not attract and employ sufficient and above all high-level experts, whose involvement to certain extent seems inevitable. Therefore, the realistic approach would be to sort of combine both options. This would mean that the ground work and the coordination of the entire process will be done internally, but those parts that entail higher expertise, as well as peer-review of the draft document should be done by external experts. In this regard, in both cases it is advised that the QA/QC procedures are done by the already developed capacity that has reach experience in the preparation of the previous inventories.

Needed capacity in MoEPP for GHG Inventory: 4.

## 5.3 Administrative capacity needed to develop NECP and Integrated National Energy and Climate Progress Reports

According to the proposed amendments to the Energy Law, development of NECP and Integrated National Energy and Climate Progress Reports would be responsibility of the MoE. These documents will in a way replace what the MoE had previously worked on – Action Plan on RES and biennial reports on RES, for the development of which external experts were used to great extent. Taking into account that MoE focus and experience of its staff is in the field of energy, while NECP and progress reports encompass other sectors as well, which are primarily in the responsibility of the MoEPP, it is necessary to establish coordination and joint efforts in developing these documents. Furthermore, it would be good if the reporting on implementation of the measures is conducted through the MRV platform.

Needed capacity in the MoE for monitoring and reporting on RES: 1

Needed capacity in the EA to administer and process data in the MVP system: 2

Needed capacity in MoEPP for regular communication and cooperation with the MoE: no need for special full-time employee, but part of the tasks of other employees

## 5.4 Administrative capacity needed to prepare other reports towards UNFCCC (NDCs, BTRs, NCs) excluding the GHG Inventory

North Macedonia, as a non-Annex I country has some flexibility in reporting to the UNFCCC in terms of timelines. With Macedonia's entry into Annex I or the EU, there will have to be more frequent reporting with strictly defined deadlines for developed countries. In all these reports, it is necessary to develop scientific models for mitigating climate change, which include modeling all proposed policies and measures in order to see their effect. So far, all mitigation analyzes have been done by MANU and the Institute of Agriculture, Faculty of Agricultural Science and Food and Hans Em Faculty of Forest Sciences, Landscape Architecture and Environmental Engineering. In terms of capacity, about ten people participate in the preparation of these analyzes, but with part-time work and years of experience in their field and deep involvement in modeling policies and measures. While the experiences of other countries show that national inventories are often prepared by state

institutions, i.e. Environmental Protection Agencies, for the preparation of mitigation analysis that are part of the obligations to the UNFCCC has a harmonized approach and is usually prepared by consultants or scientific institutions (Slovenia - Jozef Stefan, Serbia - BUR developed by a team of experts, Croatia - BUR is based on analyzes made by Hrvoje Pozar, Montenegro - SBUR - external experts, EU - Joint Research Center).

Although the draft version of the Law on Climate Action prescribes mitigation projections of the policies and measures to be prepared by the MoEPP, still the experiences from other countries are different, because mainly a scientific staff is needed. In order for the MoEPP to acquire such staff, it will take a long time (including training and models development) and a large number of jobs with an education at the PhD level.

Based on this, it is recommended that an external Authority prepare a mitigation analysis of the policies and measures, which will be selected by the Ministry of Environment (on an annual basis or in institutionalized cooperation).

However, it must be noted that these reports include also other analyzes (besides Inventory and Mitigation analyzes), such as Required capacity analysis, Technology transfer, Gender Equality and Social Inclussion (GESI), Risk analysis, etc. So far, these analyzes have been made by external experts, but some of these analyzes can be performed by the employees of the Ministry of Environment.

Needed capacity in MoEPP: no need for special full-time employee, but as part of the tasks of other employees.

## 5.5 Administrative capacity needed to develop and monitor Long-term strategy on climate action

Similar to mitigation analyzes, the Long-term strategy on climate action must be based on scientific models based on which scenarios will be created to analyze the reduction of GHG emissions. So far, one Long-term strategy on climate action has been developed in Macedonia by external experts (IPA funded project implemented by GFA Consulting Group, in cooperation and support from national and international experts). Experience can be gained from the Energy Strategies, which have been developed by MANU so far. Based on that, in terms of capacity, a similar recommendation as in the previous case can be made, i.e. an external Authority to develop the strategies, which will be selected by the Ministry of Environment (on an annual basis or with institutionalized cooperation).

Needed capacity in MoEPP for coordination of the development of the Long-term Strategy on Climate Action and monitoring its implementation: no need for special full-time employee, but as part of the tasks of other employees in the Climate Change Unit.

## 5.6 Administrative capacity needed to manage the MRV platform

To simplify the data collection process and increase transparency in monitoring the implementation of GHG emissions reduction policies and measures defined in the strategic documents, it is recommended to apply the same principle as with the MVP tool (which collects data for energy efficiency measures and policies). Given that the MVP tool is the responsibility of the EA, it is recommended that the MRV platform should be responsibility of the MoEPP. This MRV platform should have a module for communication with the MVP tool, as well as with the MoI (in the field of transport), with the SSO (for data collection), with the Industrial facilities through the EMI software, public enterprise Macedonian Forests and other relevant institutions that are covered by the policies and measures proposed in the strategic documents. Given that this is a new platform and given its complexity and the large number of entities involved, additional capacity will be needed in the MoEPP.

Needed capacity in MoEPP for administering the platform: 2 full-time employees with engineering background (one preferably IT).

## 5.7 Administrative capacity needed for Adaptation

As previously mentioned, the first tasks that will be need in the field of adaptation is to develop two strategic documents: National Adaptation Strategy and National Adaptation Plan. The recommendation for the capacity needed for the development of these strategic documents is similar to the conclusion given for the preparation of the climate change mitigation strategic documents. In fact, it is recommended that an external entity prepares National Adaptation Strategy and National Adaptation Plan, which will be selected by the MoEoEPP (on an annual basis or in institutionalized cooperation).

Needed capacity in MoEPP for coordination of the development of the National Adaptation Strategy and National Adaptation Plan and monitoring its implementation: no need for special full-time employee, but as part of the tasks of other employees.

It is clear that additional capacity in Adaptation will probably be needed in addition to the existing one, so it is recommended to continue building capacity in this regard, such as the example of CBIT junior associates (two of whom are already engaged in the Department of Waters and Department of Spatial Planning within the MoEPP).

# 6 Recommendations for posts related to climate change

## 6.1 Introduction

As mentioned above several times when giving estimation on the administrative capacity needed for each major climate change activity (preparation of document or administering a system), the preferred approach should be a combination of strengthened internal administrative capacities (human resources) and use of external experts' assistance. With that taken into account, this sub-section focuses solely on the internal administrative capacities needed - number of staff, their educational background and job description. Recommendations are given only for the institutions identified to have major role in these processes (MoEPP, MoE and EA), while for all other institutions a few tasks are defined that each institution should appropriately incorporate in the job description of the persons internally assigned to work on climate changes related activities.

## 6.2 Systematized posts in MoEPP

### 6.2.1 Introductory notes

As for the MoEPP, there are two options how its internal administrative capacity in relation to the climate changes could be strengthened, presented in sections 6.2.2 and 6.2.3.

Option 1 is the recommended option as it is more realistic to be implemented, knowing how difficult new employments in a public institution is to be approved due to the budgetary constraints.

One fact should also be taken into account. There will always be a need to involve external experts to assist if not even to have a lead role in developing various plans and reports in the field of climate change. So, the expectation that by creating and filling in as many posts as possible the entire work will be internalized is not realistic.

As the climate change is relatively new area and not much experience has been gained yet for the type and load of work, especially because of the ever-growing requirements laid down in various EU and UN documents, it is not recommendable at this stage to foresee numerous posts without making them narrowly specialized.

Posts within this option are defined on the basis of what over the last several years turned out to be regular, most frequent and demanding (time-consuming) tasks, which were elaborated above.

Total of eight posts related to climate change have been proposed with this option. They are systematized in the present Unit for Climate Change. The advantage of such approach is that all matters related to climate change will be dealt in within one and a same organizational unit under supervision of the head of the unit. The disadvantage is that certain posts fit better and tasks could be performed by other existing units within MoEPP. This especially refers to posts which only or primary tasks relate to development of GHG Inventory and/or administering the MRV platform, which could be incorporated within the MEIC.

Option 2 foresees at least 10 posts related to climate change, half of them to be systematized in the existing Unit for Climate Change, while the other half in the newly established Unit for GHG Inventory within MEIC. This option reflects the proposal provided by the team that is conducting the Functional Analysis in the MoEPP.

Regardless of the option, climate change related tasks are to be added to staff in other MoEPP units (outside the Climate Change Unit and MEIC). Specific units and / or posts where those tasks should be incorporated in the existing Act for systematization are elaborated at the end of each sub-section.

### 6.2.2 Option 1 for MoEPP

Option 1 for the key climate change unit in MoEPP is graphically presented in Figure 7 and in details explained in Table 3.

*Figure 7. Organogram – option 1 for Unit for Climate Change Policy in MoEPP*

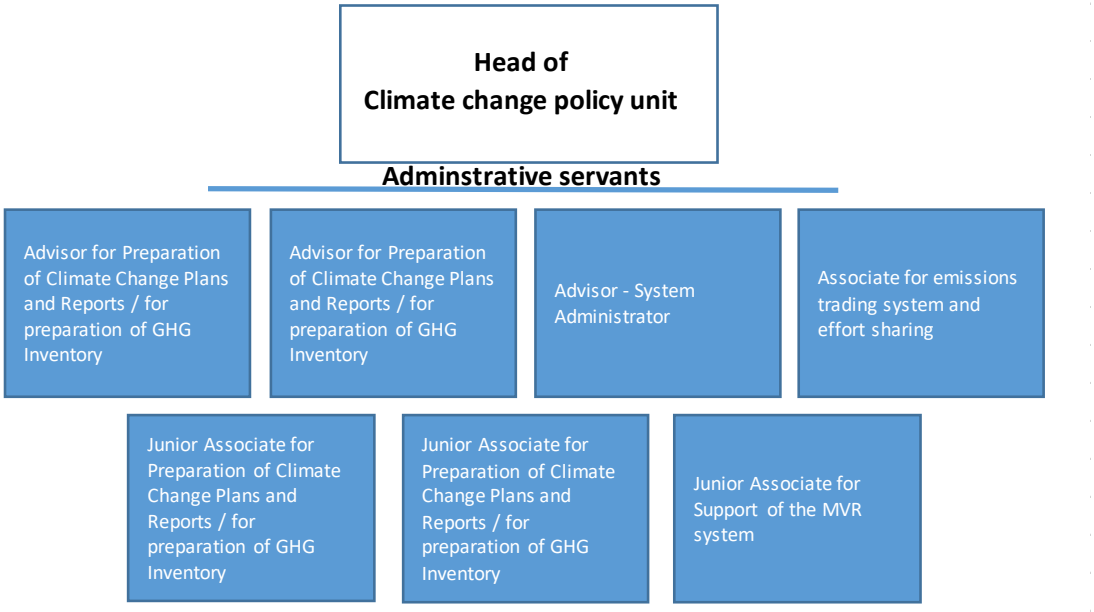



*Table 3. Option 1 – organization of Unit for Climate Change Policy*

| UNIT FOR CLIMATE CHANGE POLICY | |
|---|---|
| **1. Head of Unit** | |
| Administrative level | Head of Unit – B04 |
| Educational background | 225 – Environment; 205 – Energy; 506 – Organization and management |
| List of tasks | • Management of the unit and its employees<br>• Delegating tasks to the subordinated employees and monitoring their performance<br>• Coordinating the development of climate changes related plans and reports<br>• Coordinating and monitoring the implementation of projects defined in the relevant strategies<br>• Communicating and coordinating with heads of other organizational units within MoEPP and other institutions involved in climate changes processes, (including the local-self Governments and City of Skopje)<br>• Providing input to the MoEPP annual programmes and reports |
| **2. Administrative Servant for Preparation of Climate Change Plans and Reports / for preparation of GHG Inventory** | |
| Administrative level | Advisor – C01 |
| Educational background | 225 – Environment; 205 – Energy; 503 - Economy |
| List of tasks | • Providing input and feedback in the process of preparation of annual GHG Inventory<br>• Analyzing the requirements stemming from relevant international documents and national legislation related to GHG emissions, |

| | |
|---|---|
| | • Communicating with institutions that process data relevant for GHG Inventory,<br>• Providing answers and clarifications to the more complex questions and requests submitted through the on-call support system and related to GHG inventory,<br>• Providing proposals for implementing activities for reducing GHG emissions,<br>• Participating in implementation of activities for reducing GHG emissions. |
| **3. Administrative Servant for Preparation of Climate Change Plans and Reports / for preparation of GHG Inventory** | |
| Administrative level | Advisor – C01 |
| Educational background | 225 – Environment; 205 – Energy; 503 - Economy |
| List of tasks | • Providing input and feedback in the process of preparation of climate related plans and reports, such as GHG Inventory, NDCs, NECPs, BTRs, NAPs<br>• Communicating with institutions that process data relevant for climate related plans and reports,<br>• Coordinating, participating and / or monitoring the implementation of projects defined in the long-term Climate Action Strategy and Programme for realization of Energy Strategy related to NDCs, NECPs, BTRs, NAPs,<br>• Providing answers and clarifications to the more complex questions and requests submitted through the on-call support system and related to NDCs, NECPs, BTRs, NAPs,<br>• Preparing more complex information, reports and aggregated statistical data related to developed plans and their implementation. |
| **4. Administrative Servant – System Administrator** | |
| Administrative level | Advisor – C01 |
| Educational background | 110 – Informatics; 212 – Computer technology and informatics; 202 – Electrical engineering |
| List of tasks | • Has a role of system administrator of the MRV platform and web administrator of the national climate change platform www.klimatskipromeni.mk<br>• Registers users and assigns privileges to the platform users<br>• Provides direct support to the users for more complex issues<br>• Defines technical specification for upgrade of the MRV platform, including functional, hardware, network and database requirements<br>• Communicates with the hardware and software providers and database host and monitors the upgrades implementation<br>• Communicates with the institutions that administer database with the aim of establishing interoperability of the systems and smooth exchange of data<br>• Support data transparency and open access on the national open data platform |
| **5. Administrative Servant for emissions trading system and effort sharing** | |
| Administrative level | Associate – C03 |
| Educational background | 225 – Environment; 205 – Energy; 503 – Economy |
| List of tasks | • Provides support in the development and maintenance of Registry of issued and transferred CO2 credits, |

| | |
|---|---|
| | • Provides administrative support in organizing auctions for CO2 credits,<br>• Monitoring and verification of CO2 emissions reported by the operators of installations and aircraft operators,<br>• Monitoring the achievement of the target in accordance with Effort-sharing,<br>• Providing on-call support related primarily to CO2 credits, as well as regarding NDCs, NECPs, BTRs, NAPs. |
| **6. Administrative Servant for Preparation of Climate Change Plans and Reports / for preparation of GHG Inventory** | |
| Administrative level | Junior Associate – C04 |
| Educational background | 225 – Environment; 205 – Energy; 503 – Economy |
| List of tasks | • Providing assistance in the process of preparation of annual GHG Inventory,<br>• Communicating with institutions that process data relevant for GHG Inventory,<br>• First line support within the established on-call support system by providing direct answers and clarifications to the simple questions and requests related to GHG inventory, and re-directing complex questions and requests and questions related to NDCs, NECPs, BTRs, NAPs, to the senior staff and specialists in the unit and the ministry, Participating in implementation of activities for reducing GHG emissions,<br>• Assist in the preparation of various recommendations / questionnaires / reports related to climate change;<br>• Prepares simple information, reports and aggregated statistical data related to GHG emissions. |
| **7. Administrative Servant for Preparation of Climate Change Plans and Reports / for preparation of GHG Inventory** | |
| Administrative level | Junior Associate – C04 |
| Educational background | 225 – Environment; 205 – Energy; 503 – Economy |
| List of tasks | • Provide assistance in the process of preparation of annual GHG Inventory,<br>• Provide assistance in preparation of other climate change related plans and reports, such as NDCs, NECPs, BTRs, NAPs<br>• First line support within the established on-call support system by providing direct answers and clarifications to the simple questions and requests related to GHG inventory, NDCs, NECPs, BTRs, NAPs and re-directing complex questions and requests to the senior staff and specialists in the unit and the ministry,<br>• Support in monitoring the implementation of climate changes related activities;<br>• Assist in creating a list of a national network of experts in the field of climate changes;<br>• Assist in identifying mitigation, adaptation and reporting tools,<br>• Assist in the preparation of various recommendations / questionnaires / reports related to climate change; |

| | |
|---|---|
| | • Prepares simple information, reports and aggregated statistical data. |
| **8. Administrative Servant for Support of the MRV system** | |
| Administrative level | Junior Associate – C04 |
| Educational background | 212 – Computer technology and informatics; 225 – Environment; 503 – Economy |
| List of tasks | • Processes data in the MRV system,<br>• Communicates with users of the platform and provides support to the users how to use system functionalities,<br>• Provides assistance in analyzing the data collected and processed through the MRV platform,<br>• Prepares simple information, reports and aggregated statistical data on the use of the MRV platform. |

Preferably in the Unit for Law Harmonization and Negotiations within the Sector for European Union or possibly in the Unit for Legal, Normative and Administrative Affairs within the Sector for Legal and General Affairs tasks related to transposition of EU climate changes legislation need to specified. Specific tasks related to this subject matter should be preferably added to an already existing post (advisor for preparation of National Program for Adoption of EU legislation or junior associate for environmental legislation in the Unit for Law Harmonization and Negotiations or advisor for normative and legal affairs and personal data protection Unit for Legal, Normative and Administrative Affairs being the closest) or possibly additional specialized post to be introduced.

### 6.2.3 Option 2 for MoEPP

Option 2 for the key climate change unit in MoEPP is graphically presented in Figure 8 and in details explained in Table 4 and Table 5.

*Figure 8. Organogram – option 2 for Unit for Climate Change Policy and Unit for GHG Inventory in MoEPP*

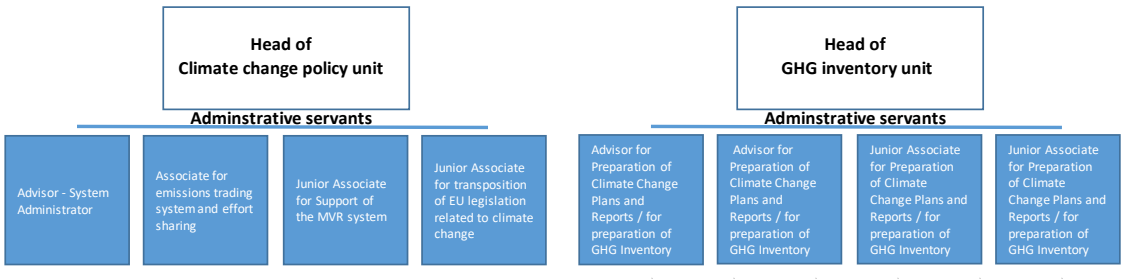



*Table 4. Option 2 – organization of Unit for Climate Change Policy*

| **UNIT FOR CLIMATE CHANGE POLICY** | |
|---|---|
| **1. Head of Unit** | |
| Administrative level | Head of Unit – B04 |
| Educational background | 225 – Environment; 205 – Energy; 506 – Organization and management |
| List of tasks | • Management of the unit and its employees<br>• Delegating tasks to the subordinated employees and monitoring their performance<br>• Coordinating the development of climate changes related plans and reports<br>• Coordinating and monitoring the implementation of projects defined in the relevant strategies |

| | |
|---|---|
| | • Communicating and coordinating with heads of other organizational units within MoEPP and other institutions involved in climate changes processes including the local-self Governments and City of Skopje)<br>• Providing input to the MoEPP annual programmes and reports |
| **2. Administrative Servant – System Administrator** | |
| Administrative level | Advisor – C01 |
| Educational background | 110 – Informatics; 212 – Computer technology and informatics; 202 – Electrical engineering |
| List of tasks | • Has a role of system administrator of the MRV platform and web administrator of the national climate change platform www.klimatskipromeni.mk<br>• Registers users and assigns privileges to the platform users<br>• Provides direct support to the users for more complex issues<br>• Defines technical specification for upgrade of the MRV platform, including functional, hardware, network and database requirements<br>• Communicates with the hardware and software providers and database host and monitors the upgrades implementation<br>• Communicates with the institutions that administer database with the aim of establishing interoperability of the systems and smooth exchange of data<br>• Support data transparency and open access on the national open data platform |
| **3. Administrative Servant for emissions trading system and effort sharing** | |
| Administrative level | Associate – C03 |
| Educational background | 225 – Environment; 205 – Energy; 503 – Economy |
| List of tasks | • Provides support in the development and maintenance of Registry of issued and transferred CO2 credits,<br>• Provides administrative support in organizing auctions for CO2 credits,<br>• Monitoring and verification of CO2 emissions reported by the operators of installations and aircraft operators,<br>• Monitoring the achievement of the target in accordance with Effort-sharing,<br>• Providing on-call support related primarily to CO2 credits, as well as regarding NDCs, NECPs, BTRs, NAPs. |
| **4. Administrative Servant for Support of the MRV system** | |
| Administrative level | Junior Associate – C04 |
| Educational background | 212 – Computer technology and informatics; 225 – Environment; 503 – Economy |
| List of tasks | • Processes data in the MRV system,<br>• Communicates with users of the platform and provides support to the users how to use system functionalities,<br>• Provides assistance in analyzing the data collected and processed through the MRV platform,<br>• Prepares simple information, reports and aggregated statistical data on the use of the MRV platform,<br>• Updates the web portal www.klimatskipromeni.mk. |
| **5. Administrative Servant for transposition of EU legislation related to climate change** | |
| Administrative level | Junior Associate – C04 |

| | |
|---|---|
| Educational background | 508 –Legal |
| List of tasks | • Follows the EU and EnC legislation (regulations, directives, decisions, recommendations) related to climate change<br>• Follows policy documents and proposals for new legislation within EU and EnC<br>• Provides assistance to the analysis of the requirements from the relevant EU legislation and EnC documents<br>• Participates in the drafting groups for transposition of EU legislation or of legal documents adopted by other international organizations in regards to the climate change<br>• Communicates with other ministries on the issue of transposition of EU climate change legislation which is responsibility of other ministries<br>• Prepares simple information and reports related to legal aspects of the climate change processes. |

*Table 5. Option 2 – organization of Unit for GHG Inventory*

| UNIT FOR GHG INVENTORY | |
|---|---|
| **1. Head of Unit** | |
| Administrative level | Head of Unit – B04 |
| Educational background | 225 – Environment; 212 – Computer technology and informatics; 506 – Organization and management |
| List of tasks | • Management of the unit and its employees<br>• Delegating tasks to the subordinated employees and monitoring their performance<br>• Coordinating the development of the GHG Inventory and related documents<br>• Coordinating and monitoring the implementation of projects defined in the relevant strategies, which relate to the GHG emissions<br>• Communicating and coordinating with heads of other organizational units within MoEPP and other institutions involved in climate changes processes<br>• Providing input to the MoEPP annual programmes and reports |
| **2. Administrative Servant for Preparation of Climate Change Plans and Reports / for preparation of GHG Inventory** | |
| Administrative level | Advisor – C01 |
| Educational background | 225 – Environment; 205 – Energy; 503 – Economy |
| List of tasks | • Providing input and feedback in the process of preparation of annual GHG Inventory<br>• Analyzing the requirements stemming from relevant international documents and national legislation related to GHG emissions,<br>• Communicating with institutions that process data relevant for GHG Inventory,<br>• Providing answers and clarifications to the more complex questions and requests submitted through the on-call support system and related to GHG inventory,<br>• Providing proposals for implementing activities for reducing GHG emissions,<br>• Participating in implementation of activities for reducing GHG emissions. |

| **3. Administrative Servant for Preparation of Climate Change Plans and Reports / for preparation of GHG Inventory** | |
|---|---|
| Administrative level | Advisor – C01 |
| Educational background | 225 – Environment; 205 – Energy; 503 – Economy |
| List of tasks | • Providing input and feedback in the process of preparation of climate related plans and reports, such as GHG Inventory, NDCs, NECPs, BTRs, NAPs,<br>• Communicating with institutions that process data relevant for climate related plans and reports,<br>• Providing answers and clarifications to the more complex questions and requests submitted through the on-call support system and related to primarily to NDCs, NECPs, BTRs, NAPs, as well as to GHG inventory,<br>• Coordinating, participating and / or monitoring the implementation of projects defined in the long-term Climate Action Strategy and Programme for realization of Energy Strategy related to NDC, NECP, TBUR. |
| **4. Administrative Servant for Preparation of Climate Change Plans and Reports / for preparation of GHG Inventory** | |
| Administrative level | Junior Associate – C04 |
| Educational background | 225 – Environment; 205 – Energy; 503 – Economy |
| List of tasks | • Providing assistance in the process of preparation of annual GHG Inventory,<br>• Communicating with institutions that process data relevant for GHG Inventory,<br>• First line support within the established on-call support system by providing direct answers and clarifications to the simple questions and requests related to GHG inventory, NDCs, NECPs, BTRs, NAPs and re-directing complex questions and requests to the senior staff and specialists in the unit and the ministry,<br>• Participating in implementation of activities for reducing GHG emissions,<br>• Assist in the preparation of various recommendations / questionnaires / reports related to climate change;<br>• Prepares simple information, reports and aggregated statistical data related to GHG emissions. |
| **5. Administrative Servant for Preparation of Climate Change Plans and Reports / for preparation of GHG Inventory** | |
| Administrative level | Junior Associate – C04 |
| Educational background | 225 – Environment; 205 – Energy; 503 - Economy |
| List of tasks | • Provide assistance in the process of preparation of annual GHG Inventory,<br>• Provide assistance in preparation of other climate change related plans and reports, such as NDC, NECP, TBUR,<br>• First line support within the established on-call support system by providing direct answers and clarifications to the simple questions and requests related to GHG inventory, NDCs, NECPs, BTRs, NAPs and re-directing complex questions and requests to the senior staff and specialists in the unit and the ministry, |

| | |
|---|---|
| | • Support in monitoring the implementation of climate changes related activities;<br>• Assist in creating a list of a national network of experts in the field of climate changes;<br>• Assist in identifying mitigation, adaptation and reporting tools,<br>• Assist in the preparation of various recommendations / questionnaires / reports related to climate change;<br>• Prepares simple information, reports and aggregated statistical data. |

## 6.3 Proposals for climate change related posts and tasks in MoE and EA

As indicated in the previous section, implementation of certain climate change requirements deriving from the international documents and/or national legislation will entail strengthened capacities of other institutions as well. First, this sub-section provides proposal for the posts to be systematized and/or specific tasks to be allocated to the staff within MoE and EA, which are identified to have bit more responsibilities compared to all others (Table 6 and Table 7). The former because is the policy maker for the energy and more specifically for RE issues and in that respect has the responsibility to develop NECP and Integrated National Energy and Climate Progress Reports. The latter because of the responsibility to administer the MVP platform as a comprehensive and demanding database for monitoring, verification and reporting on energy savings. In implementing these set of activities, both institutions must take the current cooperation with the MoEPP, which is assessed by many not to be on satisfactory level, to a higher level that would entail regular coordination and joint efforts in developing these documents and exchange of data.

**Note**: The following proposals do not imply that new posts must be systematized within these two institutions. Even more, modifications to the existing posts in order to incorporate the proposed tasks and administrative level of civil servant is more realistic option. Especially in the case of the MoE where there are already RE related systematized posts, to which these tasks could be added, as they do not demand full time employee. It is up to these institutions to review their rulebooks on systematization of posts and decide how to best incorporate them.

*Table 6. Proposal for climate change related posts in MoE*

| **Administrative Servant for plans and reports on energy and climate** | |
|---|---|
| Administrative level | Senior Associate – C02 / Advisor – C01 |
| Educational background | 205 – Energy; 202 – Electro engineering; 503 – Economy; |
| List of tasks | • Under the supervision of the Head of Unit, coordinate and provide input in the process of preparation of National Plan for Energy and Climate,<br>• Under the supervision of the Head of Unit, coordinate and provide input in the process of preparation of Integrated National Energy and Climate Progress Reports,<br>• Regularly communicate with and obtain data from institutions that collect and / or process data relevant for the plans and reports on energy and climate,<br>• Regularly communicate with and provide data to the MoEPP for the purpose of updating the MRV platform,<br>• Assist in the preparation of various recommendations / questionnaires / reports related to RE;<br>• Prepares information and aggregated statistical data, and |

| | |
|---|---|
| | • Provides support in monitoring the implementation of RE support measures and other RE related activities. |

Additional explanation of the proposal: As it is foreseen this employee to provide input to complex documents such as the NECP and progress reports are, as well as in preparation of information and aggregated statistical data, it is recommendable to be of higher administrative rank. MoE is dedicating more posts to deal with RE issues, but unlike the other posts, this one would be highly specialized on preparing of plans and reports and tasks related to these processes, while work on other RE related tasks (e.g. support in monitoring the implementation of RE support measures and other RE related activities) will be limited and of secondary importance for this employee. Preparation of NECP and progress reports are highly demanding tasks, for which the MoE and this employee must take pro-active role, regardless of the possible external assistance provided, as it was case by now (project contracted experts).

These proposed tasks in the Ministry of Economy are in the same direction with the Draft version of the Functional Analysis made at the end of 2020 by MoE and which is still in the process of harmonization. As in this document the main emphasis was on the analysis of the necessary capacity to fulfill the tasks related to climate change processes, in that direction two main responsibilities were distinguished for the Ministry of Economy:

1. Active involvement in the process of preparation and coordination of the National Energy and Climate Plan (including biennial Integrated National Energy and Climate Progress Reports) and
2. Regular communication and provision of data to MoEPP for monitoring the implementation of the measures, especially for renewable energy, through the MRV platform.

Regarding the National Energy and Climate Plan, the Draft version of the MoE Functional Analysis envisages two job positions (as part of a new Unit for monitoring of energy strategic documents) - Advisor for monitoring the National Energy and Climate Plan and Junior Associate for Monitoring the National Energy and Climate Plan.

Regarding the monitoring of the implementation of the measures, especially for renewable energy sources, in the Draft version of the Functional Analysis by MoE this obligation is included in the tasks of two units (Unit for monitoring of energy strategic documents and Unit for renewable energy sources) - 5 job positions. Their responsibilities overlap because monitoring the implementation of the RES measures is part of the process for monitoring the implementation of the measures proposed in the NECP and the Energy Strategy.

*Table 7. Proposal for climate change related posts in EA*

**Tasks for administrative servants for energy efficiency information systems and platforms**

| | |
|---|---|
| Administrative level | Combinations of Advisors – C01 and Junior Associates – C04 |
| Educational background | 205 – Energy; 202 – Electro engineering; 212 – Computer technology and informatics; 503 – Economy; 214 – Mechanical engineering |
| List of tasks | • Provide input in the process of preparation of National energy efficiency action plans and National Plan for Energy and Climate,<br>• Monitoring of the implementation of the National energy efficiency action plans especially related to measuring and reporting the energy savings,<br>• Administering the information systems for energy consumption costs for consumed energy in the public buildings (Excite), MVP platform and energy efficiency platform intended to educate the |

| | |
|---|---|
| | citizens and exchange experience among entities that have implemented energy efficiency measures,<br>• Processes data in the information systems,<br>• Provides assistance in analyzing the data collected and processed through the information systems,<br>• Deliver continuous training and provide day-to-day user support for the systems and platforms related to energy efficiency,<br>• Develop tecnical specification for upgrade of the systems with new modules and functionalities, test the developed upgrades and regularly communicate with the software developers and hosting providers<br>• Regularly communicate with and obtain data from institutions that collect and / or process data relevant for monitoring the energy efficiency measures and savings,<br>• Regularly communicate with and provide data to the MoEPP for the purpose of updating the MRV platform,<br>• Assist in the preparation of various recommendations / questionnaires / reports related to use of the systems;<br>• Prepares information and aggregated statistical data on the use of the information systems, and<br>• Provide input in the development of instructions for energy efficiency criteria in public procurements and monitoring their implementation. |

***Additional explanation of the proposal:*** Unlike the MoE that has more systematized and filled-in posts related to RE, the EA due to requirements stemming from the Law on Public Sector Employees had to limit its total number of systematized posts and to have only a couple of posts to which tasks related to MVP platform can be attributed (one senior post with general energy efficiency tasks and one post for IT specialist that deals with numerous other tasks). Recent Functional Analysis conducted by an outsourced company (ACT! Consultancy Services) proposed two posts strictly specialized on energy efficiency programs, plans and reports and two IT posts with system administrator role and/or for provision of support for use of electronic systems and preparing statistical reports. It is recommended that tasks indicated above are allocated within these posts.
The proposed tasks in EA overlap to a large extent with the tasks of the proposed job positions in the Department of Energy Efficiency in the Draft Version of the Functional Analysis by MoE. For more efficient execution of tasks, but also for optimization of the necessary resources (including financial) and capacity, it is recommended to make a clear separation, especially with the obligations related to energy efficiency between the Ministry of Economy and the Energy Agency.

## 6.4 Proposals for climate change related capacities and tasks in other institutions/sectors

Table 8 presents a list of the identified tasks that should be included in the existing posts in other institutions/sectors.

*Table 8. Minimal administrative capacities and tasks identified in other sectors/institutions*

| Institution/sector | Task |
|---|---|
| **MoF** | Providing funds for the realization of the mitigation (and most probably adaptation) measures |
| **MoAFWE** | Participation in transposition of Regulation (EU) 2018/841 and participation in implementation of the Regulation including the |

| | |
|---|---|
| | development of National forestry accounting plan |
| **MoI** | Providing data for different types of vehicles needed as part of the MRV platform |
| **MoTC and ME** | Participation in the transposition of Regulation (EU) 2019/1242 |
| **Customs Authority** | Monitoring the import of vehicles (CO2 emissions)<br>Monitor the import of substances the deplete the ozone layer and F-gasses |
| **MoTC** | Participation in defining standards for buildings (new or reconstructed) |
| **MoLSP** | Participate in creating measures to mitigate and adapt to climate change from the perspective of socially vulnerable consumers<br>Providing data for gender issue, for ensuring gender equality in the proposed mitigation and adaptation measures |
| **MoEPP - Unit for Communication, Public Relations and Education.** | Tasks related to development of climate change communication strategy, its implementation and development of progress reports and for communicating the general public on climate actions should be specified to Advisor for Information and Cooperation with Media, while tasks related to updating the national climate change web platform and social media accounts related to this subject matter to the Junior Associate for implementation of campaigns and awareness raising events and cooperation with NGO |
| **MoEPP - Sector for Spatial Planning** | Tasks related to incorporating climate change aspects into the spatial plans should be added to the Associate for spatial planning and development projects within the Unit for Plans and Spatial Policy and / or to the Advisor or Associates for the implementation of the process of strategic environmental impact assessment within the Unit for Strategic Environmental Impact Assessment. |
| **MoEPP - Unit for Development of Policy, Plans and Programmes for Waste Management.** | Tasks related to implementation of the policies and measures in the Waste sector, as specified in the climate change strategic documents should be added to the Advisor or Senior Associate for Waste Management Policies Development, |

# 7 Financial roadmap

As illustrated in the UNFCCC Handbook on institutional arrangements to support MRV/transparency of climate action and support[10], sustainable institutional arrangements require sufficient dedicated human and financial resources. Establishing and maintaining new organizational relationships, establishing and adapting data flows, recruiting and retaining expertise, developing and implementing systems and tools, implementing communications and stakeholder engagement approaches, and delivering new outputs all require resources. Those implementing national systems need to assign suitable resources.

The Handbook also presents that an additional 30 per cent time equivalent could be added (in the form of additional trainee/junior staff) for backstopping, succession planning and backup support for busy times. These directions could be used for small to medium sized countries (300,000 to 30 mln. inhabitants) and we follow them in our calculations as well.

Thus, this section of our document presents the financial roadmap (national and external sources) of long-term support for the key climate change units in MoEPP personnel and activities. Given the capacity assessment we came to the proposal of two options as summarized in the next table regarding human resources.

*Table 9. Positions for the two options with the administrative level and proper score and number of positions[11]*

| Option 1 | No. | Option 2 | No. |
|---|---|---|---|
| **Climate change unit** | | **Climate change policy unit** | |
| **Head of unit -B04; 346** | 1 | Head of unit -B04; 346 | 1 |
| **Administrative servant-V01; 281** | 3 | Administrative servant-V01; 281 | 1 |
| **Administrative servant-V03; 231** | 1 | Administrative servant-V03; 231 | 1 |
| **Administrative servant-V04; 201** | 3 | Administrative servant-V04; 201 | 2 |
| | | **GHG inventory unit** | |
| | | Head of unit -B04; 346 | 1 |
| | | Administrative servant-V01; 281 | 2 |
| | | Administrative servant-V04; 201 | 2 |
| **Total** | **8** | | **10** |

In Option 1 we have a total of 2,023 scores and for Option 2 we have a total of 2,570 scores. Given the score for the proper administrative level is 81.6 Macedonian Denars (MKD) we can calculate the basic salary.

We increase these by 10% to take into account the average increase for education level and for working experience and career progression. We also increase by 51% for the salary contributions (experience for the administrative sector in North Macedonia). In that way we calculate the sum of the gross wages and salaries.

[10] See more at: UNFCCC (2020) Handbook on institutional arrangements to support MRV/transparency of climate action and support: https://unfccc.int/sites/default/files/resource/Hand%20book_EN.pdf.

[11] Given also the Law administrative servants (OG 27/14, 199/14, 48/15, 154/15, 5/16, 142/16 и 11/18 and OG 275/19 и 14/20) and Decision on adopting the score for calculating gross salaries for state servants (OG 276/19).

## 7.1 Purpose of costing

The financial roadmap costing should present the long-term support for the key climate change units in MOEPP personnel and activities:

- Providing info on the human resources required.
- Providing an effective tool to control the overall public expenditures and prioritize between actions from the Roadmap.
- Strengthening transparency and accountability by establishing a direct relationship between functions/responsibilities/competences and public allocations/finances.
- Identify the type of the allocation (Capital expenditure-CAPEX, Operational expenditure-OPEX)
- Improve the efficiency and economical work of institutions.

## 7.2 Approaches to calculating costs

Calculating the costs can be based on different approaches:

a) **Historical basis** – Comparison of existing or expected funding with the historical level
b) **Cost drivers** – Estimating the costs of the present situation, i.e. given existing infrastructure, staffing, equipment, management quality etc.
c) **Minimum standards** – Calculating the cost of functions based on minimum service standards

Some pros and cons of each approach are described in Table 10 below.

*Table 10 Different Approaches to Calculating Costs*

| | Pros | Cons |
|---|---|---|
| **Historical basis** | Easy to apply if relevant data is available. | Does not provide information about actual financial needs and maintains problematic situations, e.g. continuous under-/overfunding. |
| **Cost drivers** | Provides a fairly accurate picture of the financial needs in the existing context. | Will retain inequalities between entities (institutions) due to differences in infrastructure. |
| **Minimum standards** | Gives an exact description of the financial needs needed to provide services in accordance with certain standards or targets. | May, depending on the actual standards/targets, require very extensive and time consuming data collection and analyses. |

As Table 10 shows, there are arguments for and against all approaches. In the longer run, the minimum service standard approach should be applied as this is the most precise way to measure financial needs and will ensure that the purposes listed above can be met.

However, in order to provide an overview of the present situation, the historical basis approach can be useful, and taking into account cost drivers can be necessary to ensure adequate funding in the longer-term adaptation of the minimum service standard approach (so as to avoid short-term financial shocks by sudden changes in the central funding).

## 7.3 Proposed approach for the costing

Given the characteristics of the Roadmap as a document, we are going to use the historical costs basis in combination with the cost drivers approach. Main drivers here are the human resources and their

historical costs in terms of wages and salaries. Further, we are going to take into account experiences with human and financial resources from the Macedonian state budget.

We are going to use the public finances structure, as the Roadmap applies to a Government structure. Thus, based on IMF Government Finance Statistics Manual[12] and Macedonian Budget Law[13] and given the nature and the specifics of the Roadmap, there are the following categories we are going to consider for costing the Roadmap:

1. **Economic classification of the costing items:**
   a) Compensation of employees: **Wages and salaries**
   b) Use of **goods and services**
2. **Assets items (we will call them Capital expenditures):**
   c) Non-financial assets (Machinery and Equipment and Machinery and Equipment not else specified like office supplies and ICT, vehicles and other capital expenses)
   d) Intellectual property products (Computer software and products if any)
3. **Other:**
   e) other items not taken into account so far but might occur in the near future

## 7.4 Assumptions and data used for the costing

**The costing used for each of the proposed item will be based on data from:**

a) Average basic salary as per the Macedonian legislation related to the wages and salaries for civil servants[14]
b) Average gross salaries taking into account the percentage of contributions over the basic salaries
c) Goods and services as per the proportional share of the wages and salaries expenditures
d) Capital expenditures as per the proportional share of the wages and salaries expenditures
e) Other is an increase by 10% of the sum of the b); c) and d)

The ratio of the **wages and salaries and goods and services** in Macedonian central budget is around 1.5:1 for the period of 2015-2019[15] thus, for the calculation of the goods and services **we take goods and services as 50% of the wages and salaries estimations.**

The ratio of the **wages and salaries and capital expenditures** in Macedonian central budget is around 1.5:1 for the period of 2015-2019[16] thus, for the calculation of the capital expenditures **we take capital expenditures as 50% of the wages and salaries estimations.**

**Note: In order to avoid exchange rate risk and inflation risk we will present the costing in hard currency i.e. in Euros[17] as well.**

[12] See more p.115: http://www.imf.org/external/Pubs/FT/GFS/Manual/2014/gfsfinal.pdf.

[13] See more: https://finance.gov.mk/files/u6/Zakon%20za%20budzeti%20-%20precisten%20tekst%20_1_.pdf.

[14] Law administrative servants (OG 27/14, 199/14, 48/15, 154/15, 5/16, 142/16 и 11/18 and OG 275/19 и 14/20) and Decision on adopting the score for calculating gross salaries for state servants (OG 276/19).

[15] See more in the IMF's Article IV consultation p.25: https://www.imf.org/en/Publications/CR/Issues/2020/01/24/Republic-of-North-Macedonia-2019-Article-IV-Consultation-Press-Release-Staff-Report-and-48982.

[16] See more in the IMF's Article IV consultation p.25: https://www.imf.org/en/Publications/CR/Issues/2020/01/24/Republic-of-North-Macedonia-2019-Article-IV-Consultation-Press-Release-Staff-Report-and-48982.

[17] 1 Euro=61.5 denars.

## Option 1 calculation

| Year | No. | 0 | 1 | 3 | 1 | 3 | |
|---|---|---|---|---|---|---|---|
| | | Head of sector B02 | Head of unit B04 | Administrative servant V01 | Administrative servant V03 | Administrative servant V04 | Total |
| | Basic salary for 1 | 806,720 | 562,752 | 457,033 | 375,710 | 424,992 | |
| 2021 | Staff | - | 1 | 3 | 1 | 3 | **8** |
| 2022 | Staff | - | 1 | 3 | 1 | 3 | **8** |
| 2023 | Staff | - | 1 | 3 | 1 | 3 | **8** |
| 2024 | Staff | - | 1 | 3 | 1 | 3 | **8** |
| 2025 | Staff | - | 1 | 3 | 1 | 3 | **8** |
| | **Budget staff** | | | | | | |
| 2021 | Wages and salaries | - | 562,752 | 1,371,098 | 375,710 | 1,274,975 | **3,584,536** |
| 2022 | Wages and salaries | - | 562,752 | 1,371,098 | 375,710 | 1,274,975 | **3,584,536** |
| 2023 | Wages and salaries | - | 562,752 | 1,371,098 | 375,710 | 1,274,975 | **3,584,536** |
| 2024 | Wages and salaries | - | 562,752 | 1,371,098 | 375,710 | 1,274,975 | **3,584,536** |
| 2025 | Wages and salaries | - | 562,752 | 1,371,098 | 375,710 | 1,274,975 | **3,584,536** |
| | | | | | | | |
| | **Goods and Services** | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | |
| 2021 | Goods and Services | - | 281,376 | 685,549 | 187,855 | 637,488 | **1,792,268** |
| 2022 | Goods and Services | - | 281,376 | 685,549 | 187,855 | 637,488 | **1,792,268** |
| 2023 | Goods and Services | - | 281,376 | 685,549 | 187,855 | 637,488 | **1,792,268** |
| 2024 | Goods and Services | - | 281,376 | 685,549 | 187,855 | 637,488 | **1,792,268** |
| 2025 | Goods and Services | - | 281,376 | 685,549 | 187,855 | 637,488 | **1,792,268** |
| | | | | | | | |
| | **Capital** | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | |
| 2021 | Capital expenditures | - | 281,376 | 685,549 | 187,855 | 637,488 | **1,792,268** |
| 2022 | Capital expenditures | - | 281,376 | 685,549 | 187,855 | 637,488 | **1,792,268** |
| 2023 | Capital expenditures | - | 281,376 | 685,549 | 187,855 | 637,488 | **1,792,268** |
| 2024 | Capital expenditures | - | 281,376 | 685,549 | 187,855 | 637,488 | **1,792,268** |
| 2025 | Capital expenditures | - | 281,376 | 685,549 | 187,855 | 637,488 | **1,792,268** |
| | | | | | | | |
| | **Other** | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | |
| 2021 | Other | - | 112,550 | 274,220 | 75,142 | 254,995 | **716,907** |
| 2022 | Other | - | 112,550 | 274,220 | 75,142 | 254,995 | **716,907** |
| 2023 | Other | - | 112,550 | 274,220 | 75,142 | 254,995 | **716,907** |
| 2024 | Other | - | 112,550 | 274,220 | 75,142 | 254,995 | **716,907** |
| 2025 | Other | - | 112,550 | 274,220 | 75,142 | 254,995 | **716,907** |
| | | | | | | | |
| | **Total Budget MKD** | | | | | | |
| 2021 | Total | - | 1,238,055 | 3,016,416 | 826,562 | 2,804,945 | **7,885,979** |
| 2022 | Total | - | 1,238,055 | 3,016,416 | 826,562 | 2,804,945 | **7,885,979** |
| 2023 | Total | - | 1,238,055 | 3,016,416 | 826,562 | 2,804,945 | **7,885,979** |
| 2024 | Total | - | 1,238,055 | 3,016,416 | 826,562 | 2,804,945 | **7,885,979** |
| 2025 | Total | - | 1,238,055 | 3,016,416 | 826,562 | 2,804,945 | **7,885,979** |
| | | | | | | | |
| | **Total Budget EURO** | | | | | | |
| 2021 | Total | - | 20,131 | 49,047 | 13,440 | 45,609 | **128,227** |
| 2022 | Total | - | 20,131 | 49,047 | 13,440 | 45,609 | **128,227** |
| 2023 | Total | - | 20,131 | 49,047 | 13,440 | 45,609 | **128,227** |
| 2024 | Total | - | 20,131 | 49,047 | 13,440 | 45,609 | **128,227** |
| 2025 | Total | - | 20,131 | 49,047 | 13,440 | 45,609 | **128,227** |

## Option 2 calculation

| Year | No. | 0 | 2 | 3 | 1 | 4 | |
|---|---|---|---|---|---|---|---|
| | | Head of sector B02 | Head of unit B04 | Administrative servant V01 | Administrative servant V03 | Administrative servant V04 | Total in Euro |
| | **Basic salary for 1** | **806,720** | **562,752** | **457,033** | **375,710** | **424,992** | |
| 2021 | Staff | - | 1 | 1 | 1 | 2 | **5** |
| 2022 | Staff | - | 2 | 2 | 1 | 3 | **8** |
| 2023 | Staff | - | 2 | 3 | 1 | 4 | **10** |
| 2024 | Staff | - | 2 | 3 | 1 | 4 | **10** |
| 2025 | Staff | - | 2 | 3 | 1 | 4 | **10** |
| | **Budget staff** | | | | | | |
| 2021 | Wages and salaries | - | 562,752 | 457,033 | 375,710 | 849,983 | **2,245,479** |
| 2022 | Wages and salaries | - | 1,125,504 | 914,066 | 375,710 | 1,274,975 | **3,690,255** |
| 2023 | Wages and salaries | - | 1,125,504 | 1,371,098 | 375,710 | 1,699,967 | **4,572,280** |
| 2024 | Wages and salaries | - | 1,125,504 | 1,371,098 | 375,710 | 1,699,967 | **4,572,280** |
| 2025 | Wages and salaries | - | 1,125,504 | 1,371,098 | 375,710 | 1,699,967 | **4,572,280** |
| | | | | | | | |
| | **Goods and Services** | **0.5** | **0.5** | **0.5** | **0.5** | **0.5** | |
| 2021 | Goods and Services | - | 281,376 | 228,516 | 187,855 | 424,992 | **1,122,739** |
| 2022 | Goods and Services | - | 562,752 | 457,033 | 187,855 | 637,488 | **1,845,128** |
| 2023 | Goods and Services | - | 562,752 | 685,549 | 187,855 | 849,983 | **2,286,140** |
| 2024 | Goods and Services | - | 562,752 | 685,549 | 187,855 | 849,983 | **2,286,140** |
| 2025 | Goods and Services | - | 562,752 | 685,549 | 187,855 | 849,983 | **2,286,140** |
| | | | | | | | |
| | **Capital** | **0.5** | **0.5** | **0.5** | **0.5** | **0.5** | |
| 2021 | Capital expenditures | - | 281,376 | 228,516 | 187,855 | 424,992 | **1,122,739** |
| 2022 | Capital expenditures | - | 562,752 | 457,033 | 187,855 | 637,488 | **1,845,128** |
| 2023 | Capital expenditures | - | 562,752 | 685,549 | 187,855 | 849,983 | **2,286,140** |
| 2024 | Capital expenditures | - | 562,752 | 685,549 | 187,855 | 849,983 | **2,286,140** |
| 2025 | Capital expenditures | - | 562,752 | 685,549 | 187,855 | 849,983 | **2,286,140** |
| | | | | | | | |
| | **Other** | **0.1** | **0.1** | **0.1** | **0.1** | **0.1** | |
| 2021 | Other | - | 112,550 | 91,407 | 75,142 | 169,997 | **449,096** |
| 2022 | Other | - | 225,101 | 182,813 | 75,142 | 254,995 | **738,051** |
| 2023 | Other | - | 225,101 | 274,220 | 75,142 | 339,993 | **914,456** |
| 2024 | Other | - | 225,101 | 274,220 | 75,142 | 339,993 | **914,456** |
| 2025 | Other | - | 225,101 | 274,220 | 75,142 | 339,993 | **914,456** |
| | | | | | | | |
| | **Total Budget MKD** | | | | | | |
| 2021 | Total | - | 1,238,055 | 1,005,472 | 826,562 | 1,869,963 | **4,940,053** |
| 2022 | Total | - | 2,476,109 | 2,010,944 | 826,562 | 2,804,945 | **8,118,561** |
| 2023 | Total | - | 2,476,109 | 3,016,416 | 826,562 | 3,739,927 | **10,059,015** |
| 2024 | Total | - | 2,476,109 | 3,016,416 | 826,562 | 3,739,927 | **10,059,015** |
| 2025 | Total | - | 2,476,109 | 3,016,416 | 826,562 | 3,739,927 | **10,059,015** |
| | | | | | | | |
| | **Total Budget EURO** | | | | | | |
| 2021 | Total | - | 20,131 | 16,349 | 13,440 | 30,406 | **80,326** |
| 2022 | Total | - | 40,262 | 32,698 | 13,440 | 45,609 | **132,009** |
| 2023 | Total | - | 40,262 | 49,047 | 13,440 | 60,812 | **163,561** |
| 2024 | Total | - | 40,262 | 49,047 | 13,440 | 60,812 | **163,561** |
| 2025 | Total | - | 40,262 | 49,047 | 13,440 | 60,812 | **163,561** |

# 8 Action plan

The action plan for implementation of Option 1 is presented in Table 11.

*Table 11. Action plan for implementation of Option 1*

| *Objective* | *Action* | *Timeframe* | *Responsible entity* |
|---|---|---|---|
| **Fulfil the Emissions monitoring and reporting requirements under EnC/EU and UNFCCC (including Paris Agreement)** | Action 1: Amend the acts for internal organization and systematization of posts in MoEPP | 2 months | MoEPP (HR Unit, State Advisor for Climate Change, State Secretary) |
| | Action 2: Employ additional staff in MoEPP for GHG Inventory preparation:<br>Head of Climate change policy unit + 4 Administrative Servants for Preparation of Climate Change Plans and Reports / for preparation of GHG Inventory (2 advisors and 2 junior associates)<br>for the purpose of which the annual employment plans and budget for 2022 and 2023 should foresee (allocate funds) for these new employments. | - 6 months for preparation of annual employment plan and budget<br>- from 1 to 2 years for new employments | - MoEPP (HR Unit, State Advisor for Climate Change)<br>- Ministry of Finance and Ministry of Information Society and Administration for approvals |
| | Action 3: Employ additional staff in MoEPP for managing the MRV platform:<br>Administrative Servant – System Administrator (advisor) + Administrative Servant for Support of the MRV system (junior associate)<br>for the purpose of which the annual employment plans and budget for 2022 and 2023 should foresee (allocate funds) for these new employments. | - 6 months for preparation of annual employment plan and budget<br>- from 1 to 2 years for new employments | - MoEPP (HR Unit, State Advisor for Climate Change)<br>- Ministry of Finance and Ministry of Information Society and Administration for approvals |

| | | | |
|---|---|---|---|
| | Action 4: Employ additional staff in MoE for preparation and reporting on National Energy and Climate Plan: at list one of the two foreseen posts for administrative servant for plans and reports on energy and climate<br><br>for the purpose of which the annual employment plan and budget for 2022 should foresee (allocate funds) for the new employee | - 6 months for preparation of annual employment plan and budget<br><br>- 1 year for new employment | - Ministry of Economy (HR unit, State Secretary)<br><br>- Ministry of Finance and Ministry of Information Society and Administration for approvals |
| | Action 5: Employ additional staff in EA to administer and process data in the MVP system:<br><br>2 employees with tasks related to energy efficiency information systems and platforms<br><br>for the purpose of which the annual employment plan and budget for 2022 should foresee (allocate funds) for the new employees | - 6 months for preparation of annual employment plan and budget<br><br>- 1 year for new employments | - Energy Agency (HR specialist, Director)<br><br>- Ministry of Finance and Ministry of Information Society and Administration for approvals |
| | Action 6: Incorporate tasks in MoE and MoEPP in post description for communication and cooperation between the two Ministries (including a detailed protocol for cooperation between the two Ministries) | 1 year | |
| | Action 6: Enable external Authority to prepare mitigation analysis (as part of NDC, BTR, NC, Long-term Strategy)<br><br>• Adjust the draft version of the Law on Climate Action<br>• Engage external Authority for preparation of mitigation analysis of the policies and measures, which will be selected by the MoEPP (on an annual basis or in institutionalized cooperation), for the purpose of which the Annual Procurement Plan for 2022 should include procurement of consultancy services in case institution cooperation is not possible | - 3 months for the legal modifications<br><br>- 1 year for contracting external entity | - MoEPP (Climate Change staff, Public Procurement Unit)<br><br>- Contracted entity |

| | | | |
|---|---|---|---|
| **Fulfil the ETS and Effort sharing requirements** | Action 1: Engage external Authority for preparation of a bylaw to define the way the national carbon pricing system will function and for creating and maintaining a register of issued and transferred credits | 1-3 years | - MoEPP (Climate Change staff, Public Procurement Unit)<br>- Contracted entity |
| | Action 2: Engage external Authority for transposing the Regulation (EU) 2018/842 and calculating the target of North Macedonia in line with the Decision No 406/2009/EC<br>for the purpose of these two actions the Annual Procurement Plans for 2022 and 2023 should include procurement of consultancy services | | - MoEPP (Climate Change staff, Public Procurement Unit)<br>- Contracted entity |
| | Action 3: Employ additional staff in MoEPP:<br>Administrative Servant for emissions trading system and effort sharing (associate)<br>for the purpose of which the annual employment plan and budget for 2023 should foresee (allocate funds) for the new employee | 1-3 years | - MoEPP (HR Unit, State Advisor for Climate Change)<br>- Ministry of Finance and Ministry of Information Society and Administration for approvals |

| | | | |
|---|---|---|---|
| **Fulfil the land-based emission requirements** | Action 1: Engage external Authority (preferably including the existing AFOLU team of experts involved in the preparation of UNFCCC documents) for transposition of the Regulation (EU) 2018/841, verification of the fulfillment of North Macedonia to the commitment stated in the Regulation, development of National forestry accounting plan | 1 year | - Ministry of Agriculture, Forestry and Water Economy<br>- Contracted entity |
| **Fulfil the road transport requirements** | Action 1: Engage external Authority for transposition of Regulation (EU) 2019/631 and Regulation (EU) 2019/1242 | 1 year | - Ministry of Transport and Communication<br>- Contracted entity |
| **Fulfil the EE and RES requirements** | The actions are already included in the Emissions monitoring and reporting requirements | / | |
| **CCS** | No actions are needed | / | |
| **Ozone layer** | No additional actions are needed | / | |
| **F-gasses** | Action 1: Engage external Authority for development of a detailed study on the analysis, including a list of concrete policies and measures for achieving the HFCs reduction target according to the Kigali Amendment. | 1-2 years | - MoEPP (Climate Change staff, Public Procurement Unit)<br>- Contracted entity |
| **Adaptation** | Action 1: Engage external Authority for development of National Adaptation Strategy | 1-3 years | - MoEPP (Climate Change staff, Public Procurement Unit)<br>- Contracted entity |
| | Action 2: Engage external Authority for development of National Adaptation Plan | 1-3 years | |
| | Action 3: Engage external Authority for analysing necessary capacity for implementation of NAS and NAP (with further specification of the work responsibilities so that adaptation will become an integral part of the activities in MoEPP) | 3-5 years | |

| | | | |
|---|---|---|---|
| | Action 4: Continue building capacity in Adaptation, such as the example of CBIT junior associates | 1-5 years | - MoEPP (Climate Change staff, HR Unit) |

*Note: This action plan involves implementation of Option 1. Option 2 involves additional actions for employment in MoEPP: Head of GHG Inventory Unit (as there is a separate unit for GHG Inventory) and Administrative Servant for transposition of EU legislation related to climate change (which will facilitate the process of transposition of the EU acquis).*

Additionally, tasks for other institutions/sectors are identified which should be incorporated into the current systematization of posts of the corresponding institution (as presented in Table 8).

The cost of MoEPP employment in Option 1 is 128,277 € annually.

# 9 Annex 1 - Climate change institutional set-up in Slovenia

This annex is addressing the institutional set up under the EU climate Acquis framework in Slovenia which is feeding the institutional set -up at the EU level and which is at national level ensuring both policy making and EU and national policy implementation and fulfilment of all obligations towards the EU and international community.
The annex is in principle structured following the base EU climate set-up, which is at the upper level in principle disaggregated into EU segment and international e.g. UNFCCC segment. Within the specific segment the institutional set up is the further disaggregated into institutional set-up for policy making and institutional set-up for policy implementation. While policy making institutional set-up has to be capable of dealing with three levels of policy making (UN level, EU level, and National level), policy implementation is to deal with implementation on national level arising from requirements coming from above mentioned levels. It has to be noted that EU climate legal framework is in constant evolution and therefore it is important that each legislative act is covered by relevant national policy officer.

Regarding the Climate Acquis two institutions in Slovenia are covering policies making process and implementation.

- Ministry of Environment and Spatial planning - Policy making process
- Environment Protection Agency of the Republic of Slovenia[18] - Policy implementation

In addition, policies and measures are implemented through of support of:

- Ecofund - which is an independent legal entity with the Ministry of the Environment and Spatial planning.

Ministry of the environment and spatial planning is organised in

- Directorate for Environment,
- Directorate for Water and Investments and
- Directorate for Spatial Planning, Construction and Dwellings.

Directorate of environment (81 policy officers+ 12 administrative staff) is organised in

- Sector for Environment and Climate Change, (36 policy officers)
- Sector for Strategic Environmental Assessment, (10 policy officers)
- Sector for Nature Conservation and (23 policy officers)
- Sector for Waste Management (12 policy officers)

Sector for Environment and Climate Change is further organised in

- Section for biotechnology (3 policy officers)
- Section for Climate Change (6 policy officers + 7 employees of Climate Change Fund +6 employees for implementation of LIFE+ project CARE4CLIMATE)
- Section for Environment Protection (20 policy officers and legal support)

Work of policy officers within the Sector of Environment and Climate Change is organised in accordance with the EU and UNFCCC organisation of activities.

Environment Protection Agency of the Republic of Slovenia (EARS) is organised as follows.

- Office for Environment and Nature Protection
- Office for the State of Environment
- Office for Environmental Monitoring
- Office for Meteorology and Hydrology
- Office for Seismology

[18] Enviroment Protection Agency is a body witin the Ministry of Environment and Spatial planning

Implementation of EU, International and national policies is located in the Office for Environment and Nature protection in Sector for Air Quality (5 policy officers are allocated to climate (including F-gasses) related implementation activities.
The Core team of policy officers responsible for both policy making and policy implementation in Slovenia consists of 15 policy officers. How their responsibilities in the context of EU institutional set up and international obligations are assigned is presented in subsequent paragraphs.

## 9.1 National institutional set up under EU Climate acquis

### 9.1.1 EU Negotiations /policy making institutional set-up

In principle EU legislative process can be split to preparation of primary and secondary legislation.
General distinction between primary and secondary legislation is associate with the nature of legislation process and institutions involved in its adoption.
Primary legislation is presented and discussed in the European Councill Working Party for Environment[19] and is through specific procedure at the end adopted by the EU Council and EU Parliament. The same procedure is applied when primary legislation is revised or amended.

#### *9.1.1.1 Primary EU climate legal framework*

The following legal framework which is negotiated in the WG Environment is considered as the most important EU Climate primary legislation (Directives and Regulations of the European Parliament and of the Council):

- EU-ETS (Directive 2003/87/EC as amended)
- $CO_2$ and cars (Regulation 2019/631/EU)
- Heavy duty vehicles (Regulation 2019/1242/EU)
- $CO_2$ labelling of Cars (Directive 1999/94/EC)
- Effort sharing decision e.g. Binding annual GHG emission reductions by Member States from 2021 to 2030 (2018/842/EU)
- F-gasses (Regulation 517/2014/EU)
- LULUCF opt-in (Regulation (EU) 2018/841 of the European Parliament and of the Council of 30 May 2018 on the inclusion of greenhouse gas emissions and removals from land use, land use change and forestry in the 2030 climate and energy framework),
- MRV for Shipping (Regulation 2015/757/EU of the European Parliament and of the Council)
- Limitation of scope for aviation under the EU-ETS (Regulation (EU) 2017/2392 amending Directive 2003/87/EC)
- Carbon Capture and Storage (Directive 2009/31/Ec)

It has to be noted that dossiers are predominantly discussed at the Working Party (WP) one at the time (in parallel discussion of more than one dossier at the time at WP for Environment do happen if justified by political circumstances[20]).

Institutional set up in Slovenia to cover WP on Environment:

1x Policy officer from the Ministry of Environment and Spatial Planning is coordinating expert support and coordinating the preparation of the national position for specific dossier.

[19] WP for Environment is in principle always meeting in Consilium Building in Brussels. National flag is represented by Brussels based national attaché. Meetings are always chaired by current Presidency. In the meeting room there is a second-row seat for 1 national expert which is as appropriate attending the meeting and providing expert support to national attaché responsible for Environmental dossiers.

[20] For example, during the preparation of so-called Energy and Climate packages, more than one dossier is discussed at the time (revision of the EU-ETS directive and Effort Sharing decision are discussed at the same time at the WP on Environment and in addition in parallel Energy efficiency targets are discussed at WP on Energy)

1x National coordination Working group "WG27" – 1 policy officer from relevant institutions (Ministry of Economy, Ministry of Enterprise, Ministry of Foreign Affairs, Governmental Office for EU Affairs). WG27 is chaired by Ministry of Environment and spatial planning.

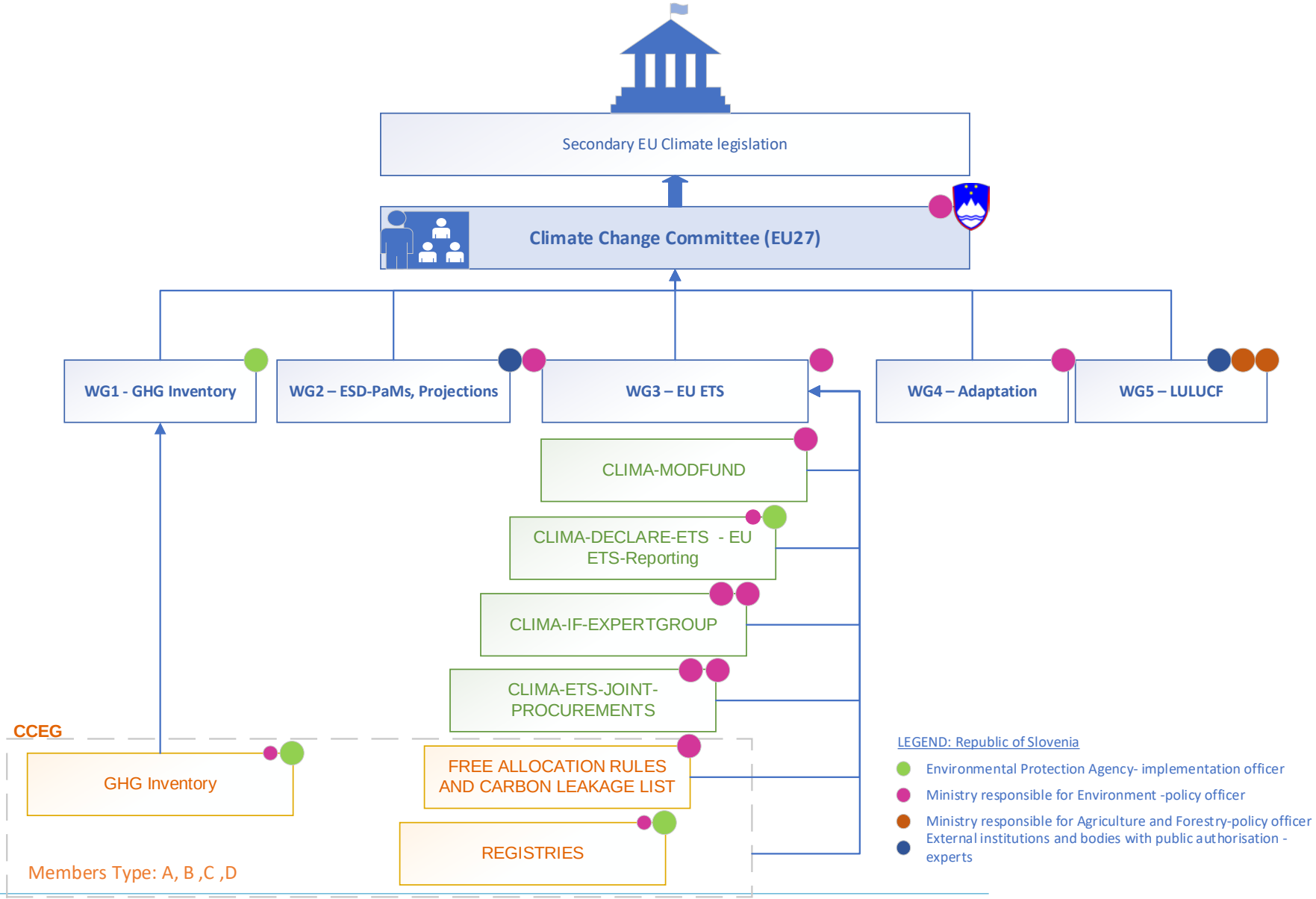
Purpose of the national working group WG 27:
To discuss the position paper of a specific dossier currently discussed and negotiated in WP Environment in Brussels. Initial position paper is prepared by policy officer responsible for the dossier.

Level of attendance at WG27.
WG27 is represented at the level of Directors of Directorates, however each director can appoint its deputy.
Timing: WG27 is discussing national position before every meeting of the WP for environment in Brussels. When position paper is agreed at the WG27 level it is entered into national EU Electronic System for formal approval by the Government of Republic of Slovenia.
Once approved by the Government the position paper becomes visible to national attaché in Brussels responsible for the dossier and responsible to defend national positions in Brussels.

#### 9.1.1.2 Secondary EU climate legal framework

Secondary legislation (Delegated or Implementing Regulations) is adopted through Comitology procedure. The adoption body under this procedure is Climate Change Committee, which consist of representatives of Member States and where implementing legislation is adopted by qualified majority.

Each of the above-mentioned primary legislation dossiers have one or more implementing or delegated decision which are at the technical level implementing the primary legislation.
Climate Change Committee where such secondary legislation is adopted always meets in Brussels and is always chaired by the European Commission. Due to variety of the primary legislation the Climate change Committee is supported by the working groups which are also chaired by European Commission.


Secondary EU Climate legislation
Climate Change Committee (EU27)
WG1 - GHG Inventory
WG2 – ESD-PaMs, Projections
WG3 – EU ETS
WG4 – Adaptation
WG5 – LULUCF
CLIMA-MODFUND
CLIMA-DECLARE-ETS - EU ETS-Reporting
CLIMA-IF-EXPERTGROUP
CLIMA-ETS-JOINT-PROCUREMENTS
CCEG
GHG Inventory
FREE ALLOCATION RULES AND CARBON LEAKAGE LIST
REGISTRIES
Members Type: A, B ,C ,D
LEGEND: Republic of Slovenia
Environmental Protection Agency- implementation officer
Ministry responsible for Environment -policy officer
Ministry responsible for Agriculture and Forestry-policy officer
External institutions and bodies with public authorisation - experts

**Working Group 1- "Annual Inventories"** under the Climate Change Committee

This working group is to assist DG Clima and the Member States to meet its reporting obligations under the EU and UNFCCC legal framework. Issues related to the results of the EU inventory reviews and potential adjustments to the GHG emission inventory are also discussed in this group. WG1 has one cross cutting CCEG[21] working group

- **CLIMA-POLICY-EXPERT-GROUP - CCEG - GHG Inventory**

CCEG Working group under WG1 is addressing the crosscutting issues (such as changes in GWP) between EU-ETS and GHG inventory.

Institutional set-up in Slovenia to cover WG1.
1x Policy officer from the Environment Protection Agency of the Republic of Slovenia responsible for the preparation of the national GHG inventory and

1x Policy officer from the Ministry of the Environment and Spatial Planning (same as appointed to represent Slovenia in the CCC).

**Working Group 2 – "Implementation of the Effort Sharing decision, Policies and Measures and Projections"** under the Climate Change Committee.

This working group is to assist DG Clima and Member States in implementation of its policies and measures related to implementation of Effort Sharing Decision. Within the scope of this working group climate modelling at the level of EU and each Member state is presented and discussed together with technical options for achieving future EU emission reduction targets.

Institutional set-up in Slovenia to cover WG2.
1x Policy officer from the Ministry of the Environment and Spatial Planning (same as appointed to represent Slovenia in the CCC).

It has to be noted that occasionally the WG2 is also attended by representative of the national institution responsible for climate modelling.
1x Senior advisor from Institut Jožef Stefan (when appropriate) responsible for national Energy and GHG emission modelling and reporting on PAMs.

**Working group 3 – "Emission trading"** under the Climate Change Committee

This working group is a nucleus for all preparation of technical implementing acts related to EU-ETS and its smooth functioning, mainly related to Monitoring, Reporting and Verification (MRV) for stationary sources, shipping and aviation, benchmarking and other technical issues associated with EU-ETS. Politically sensitive issues or issues with political dimension such as free allocation of allowances, carbon leakage and registry related issues have been discussed under the following thematic CCEG's.

- **CLIMA-DECLARE-ETS - EU ETS-Reporting**

  This working group is addressing the issue of official submissions (such as submission of National Implementing Measures (NIMs) and reporting by the Member States to the European Commission**.** Reporting as such is conducted through secured EU IT system.

  Institutional set-up in Slovenia

[21] Commission expert groups on climate change policy (CCEG). The CCEG[21] assists DG Clima in the implementation of its policies and the preparation of delegated acts, in relation to the legislation adopted for the implementation of the Paris Agreement, i.e. Directive 2003/87/EC (EU Emissions Trading System – ETS) and the impending Effort Sharing Regulation, and to Regulation 525/2013 (Monitoring Mechanism Regulation - MMR). The members of this group are experts from Member States (D Type), other public entities such as authorities from non-EU countries, and type A, B and C members.

1x policy implementation officer from the Environment Protection Agency of the Republic of Slovenia responsible for the EU-ETS Registry

1x Policy officer from the Ministry of the Environment and Spatial Planning (responsible for EU-ETS Directive, which is also the same person as appointed to represent Slovenia in the CCC).

- **CLIMA-ETS-JOINT-PROCUREMENTS - Publication procurement - Opening and Evaluation committees**

Working group for joint procurement is dealing with joint procurement for evaluation of provider for EU auctioning platform, preparation of updated and functionalities to the common EU auctioning platform.

Institutional set-up in Slovenia

1x Policy officer from the Ministry of the Environment and Spatial Planning (responsible for public procurement under Climate Change Fund).

1x Policy officer from the Ministry of the Environment and Spatial Planning (responsible for EU-ETS Directive, which is also the same person as appointed to represent Slovenia in the CCC).

- **CLIMA-IF-EXPERTGROUP - Innovation Fund application process**

This Working group is dealing with operationalization of the Article 10a point 8 which allocates 450 Mio EUA to support innovation in low-carbon technologies and in specific processes. The activities of the group is to prepare all the necessary documentation and procedures and eligibility criteria for the appointed institution to start with tendering procedures and to prepare a call for submission of eligible projects.

Institutional set-up in Slovenia

1x Policy officer from the Ministry of the Environment and Spatial Planning (responsible for EU-ETS Directive, which is also the same person as appointed to represent Slovenia in the CCC).

1x Policy officer from the Ministry of the Environment (responsible for circular economy and innovations).

- **CLIMA-MODFUND - Modernisation Fund**

This Working group is dealing with operationalization of the Article 10d which establishes a fund to support investments proposed by the beneficiary Member States, including the financing of small-scale investment projects, to modernise energy systems and improve energy efficiency, in Member States with a GDP per capita at market prices below 60 % of the Union average in 2013.

Institutional set-up in Slovenia

1x Policy officer from the Ministry of the Environment and Spatial Planning (responsible for EU-ETS Directive, which is also the same person as appointed to represent Slovenia in the CCC).

- **CLIMA-POLICY-EXPERT-GROUP - CCEG - FREE ALLOCATION RULES AND CARBON LEAKAGE LIST**

This working group is dealing with operationalization rules for free allocation of allowances (Article 10a) under the EU-ETS and with carbon leakage list (Article 10a and Article 10b). Those

elements are be kept under review in the light of climate policy measures in other major economies.

Institutional set-up in Slovenia
1x Policy officer from the Ministry of the Environment and Spatial Planning (responsible for EU-ETS Directive, which is also the same person as appointed to represent Slovenia in the CCC).

- **CLIMA-POLICY-EXPERT-GROUP - CCEG - REGISTRIES**

This working group is dealing with implementation of amendments to the Union registry due to amendments to the EU-ETS Directive or changes in the scope of the sectors included in the EU-ETS. The registry keeps track of the ownership of allowances held in electronic accounts, just as a bank has a record of all its customers and their money.

Institutional set-up in Slovenia
1x Policy implementation officer from the Environment Protection Agency of the Republic of Slovenia responsible for the EU-ETS Registry

**Working group 4- "Adaptation" under the Climate Change Committee**
This working group is dealing with Adaptation related issues and exchange of good practices regarding preparation of national adaptation plans.

Institutional set-up in Slovenia to cover WG4.
1x Policy officer from the Ministry of the Environment and Spatial Planning responsible for adaptation issues.

**Working Group 5 "Implementation of the LULUCF Decision and policy development of the land use, land use change and forestry sector"** under the Climate Change Committee

This working group is discussing the implementation of LULUCF decision (No 529/2013/EU as amended) which requires that Member States must be able to account for and report the GHG emissions and removals from activities on cropland, grazing land, forests and afforested, reforested and deforested land by 2020. In addition, it obliges Member States to prepare Action Plans setting out measures to limit or reduce emissions, and to maintain or increase removals from the LULUCF sector. Working group is also addressing issues related to progress on implementation of the decisions as well as issues related to accountings and adjustments of removals from above mentioned activities.

Institutional set-up in Slovenia to cover WG5.
1x Senior Advisor from Forestry Institute of Republic of Slovenia
1x Policy officer from Ministry for Agriculture and Forestry – Directorate for Agriculture
1x Policy officer from Ministry for Agriculture and Forestry – Directorate for Forestry

### 9.1.2 EU Climate Policy implementation

#### *9.1.2.1 Policy implementation and reporting under EU climate acquis*

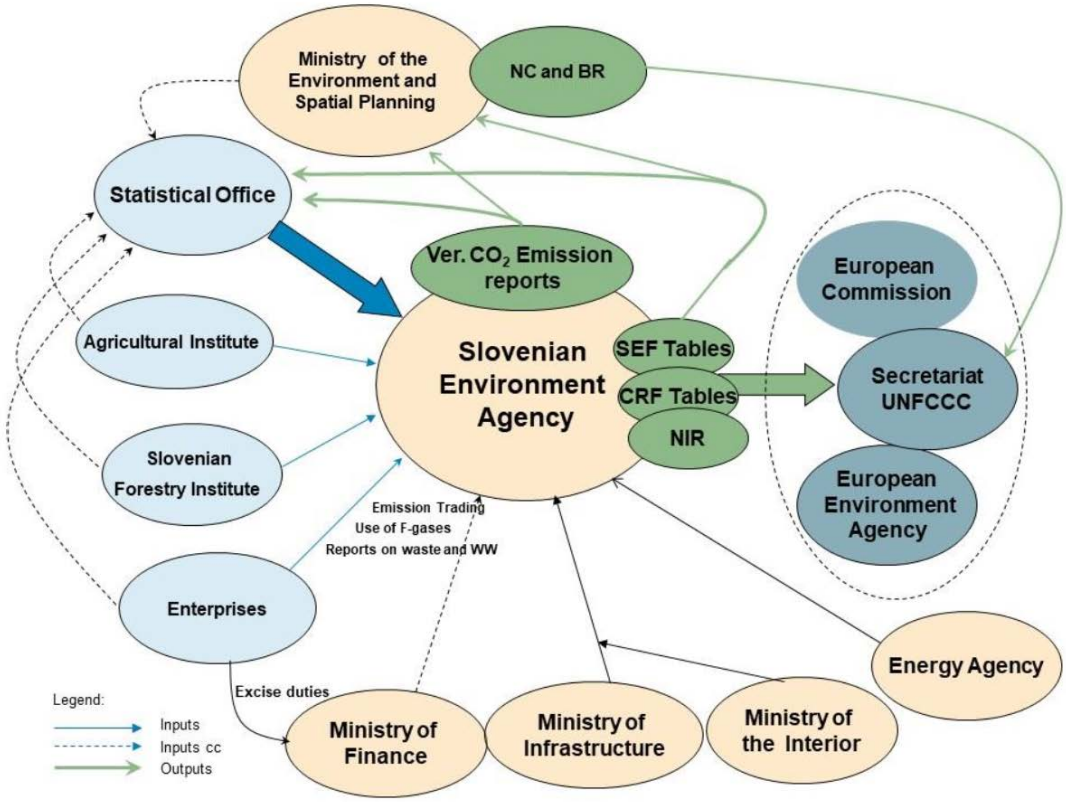
In line with general principle of division of responsibilities general responsibility for EU climate policy implementation is with Environment Protection Agency with the assistance and supervision of its Ministry.
EU Policy implementation is too large extend reflected in different reporting obligations arising from Monitoring Mechanism Regulation[22] and preparation of deliverables which are as follows:

- R.1 - Reporting on the National Low-Carbon Development Strategy (chap 2 art 4)

[22] Monitoring Mechanism Regulation 525/2013/EC has been amended by Energy and Climate Governance Regulation (2018/1999/EU), however the reporting obligations have practically not being significantly changed.

- R.2 - Preparation of annual UNFCCC and Kyoto MRV National GHG inventories (reference year to year X-2) by establishing and maintaining a National Inventory System (chap 3 art 5 and 7).
- R.3 - Reporting an approximated GHG inventories (proxy) for the year (X-1) (chap 3 art8).
- R.4 - Reporting for the EU Decision No 529/2013/EU on LULUCF (chap 3 art 7).
- R.5 – Biennial reporting on policies and measures (chap 5 art 13).
- R.6 – Reporting on GHG projections by establishing a related National system (chap 5 art 14).
- R.7 - Reporting on National adaptation actions (chap 6 art 15).
- R.8 - Reporting on financial and technology support provided to developing countries (chap 6 art 16).
- R.9 - Reporting on the use of auctioning revenue and project credits (chap 6 art 17).
- R.10 – Preparation of biennial reports (which is to replace Biennial report (BR) for Annex I countries) - and National communications (chap 6 art 18).

In order to meet all the above-mentioned obligations, the following GHG inventory system (with Environment Protection Agency in its core) was set in place:




For smooth running of the system the above-mentioned structure is supported by

1 x QA/QC manager (heads of sector for Air Quality at EARS)

2 x inventory experts at the EARS (one with general overall responsibility)

1x Agriculture expert from Agricultural Institute of the Republic of Slovenia (expansion of the statue of the institute was introduced by the Government of Slovenia to cover GHG inventory reporting, the technical details are covered by memorandum of understanding)

2x Forestry experts from Forestry Institute of the Republic of Slovenia (Public authorisation for conduction of GHG Inventory and EU related reporting issues was granted to the Forestry Institute of the Republic of Slovenia through public authorisation in accordance with provision of the Article 92 of the Law on environmental protection)

In addition to this core team additional support is ensured by registry administrator when it comes to information on accounting of Kyoto Units or information on changes to the nationally registry.

Some members of the above-mentioned team are engaged in collecting all relevant data regarding the implementation of PAMs from agriculture and forestry sector[23]. The data is streamlined to external public research institution (Institut Jožef Stefan), which is a national institution responsible for Energy/Air Quality/ Climate modelling. This institution is also preparing on biennial basis reporting on policies and measures (R.5 – Biennial reporting on policies and measures). The same institution is also appointed to prepare national Strategic Energy/Air Quality/Climate documents and discussion papers and action plans.

In terms of information that feed into the monitoring of the process regarding the implementation of specific PaMs, the role of public EcoFund (established by the Law on Environment - Article 143) has to be highlighted. EcoFund is supported by rather advance software sweet which allows to collect all relevant information for each project supported by that found (grants to the citizens of numerous energy efficiency/ air quality and climate measures). Access of the Eco fund financing is rather simple and also supported by the EcoFund advisory network (ENSVET) of more than 200 independent energy advisors with have offices all around Slovenia (and are consulting citizens free of charge).

In order to monitor the progress of policy implementation and to avoid the conflict-of-interest relevant NGO is selected through public tendering procedure to assess and evaluate progress made in the implementation of policies and measure as contained in the policy documents. After the assessment the report of such assessment is presented to the public.

- In addition to monitoring mechanism regulation related implementation activities, Environmental Agency of the Republic of Slovenia is also responsible for EU policy implementation in the scope of EU-ETS where the following activities are to be performed:

- Procedures related to the issuing of the GHG Permit for stationary installations
- Procedures related to the approval of the monitoring plans
- Procedures related to the assessment and approval of the improvement plans
- Procedures related to monitoring of conditions for installations to opt-out and to return to EU ETS is conditions.
- Procedures related to approval significant changes to the approved monitoring plan
- Procedures related to the access to the EU registry
- Procedures related to opening and closing of EU trading accounts
- Procedures related to the changes in authorisation for the access to the EU trading account
- Procedures related to the annual reporting with regards to the compliance of surrendering allowances to the EU Registry
- Reporting of the accounting related information to the GHG inventory team and to the European commissions

The activities as described above are entrusted to two implementation officers at the EARS which are also officially nominated as Registry administrator and as Deputy of the Registry administrator and are subject of special security clearance.

Furthermore, before the introduction of the $CO_2$ tax, Slovenia introduced voluntary scheme for the enterprises and industry to avoid $CO_2$ taxation if they agree on contractual obligation to reduce GHG emissions from specific installation where contracting parties agreed that the proposed measures by the operator of the installation will be included in the contractual obligations. Management of those contracts and monitoring of the progress in implementation of measures was also entrusted to the Environment Protection Agency of the Republic of Slovenia.

Since Slovenia is one of the many EU countries that also introduced $CO_2$ tax (introduced 10 year before joining the EU), it has to be mentioned that the set-up and design of the $CO_2$ taxation in Slovenia was entrusted to Ministry of the Environment with Ministry of Finance as a partner in the design process, while implementation of $CO_2$ taxation is solely with the Ministry of Finance as any other taxation with

[23] Those experts are together with representatives from the Ministry responsible for Agriculture and Forestry also responsible for the reporting under 529/2013/EC (as amended).

the Ministry which still keeps responsibility to set the carbon taxation on yearly basis. One of the purposes of setting taxation on yearly basis is to have flexibility in immediate response in case Slovenia would enter the pathway of not reaching its obligations from the Effort Sharing Decision.

## 9.2 National institutional set up under the UNFCCC

In principle national institutional set-up under the UNFCC is Slovenia is still under development, however no major progress has been made in past decade. One of the reasons for such situation is a general EU wide rule when it comes to participation at international bodies such as UNFCCC – "EU speaks in one voice", which is in principle the voice of the rotating presidency. Therefore, under the UNFCCC the EU Member States are "one family" and each of the "family member" is contributing its share in accordance with its institutional capacities. Therefore, Slovenia is in this "family" represented by limited personal, which is in most cases only with

1x Policy officer from the Ministry of the Environment and Spatial Planning (UNFCCC focal point).

Member states are under the UNFCCC in principle following those agenda items which are of the national interest (such as REDD+, or flexible mechanisms and carbon markets)

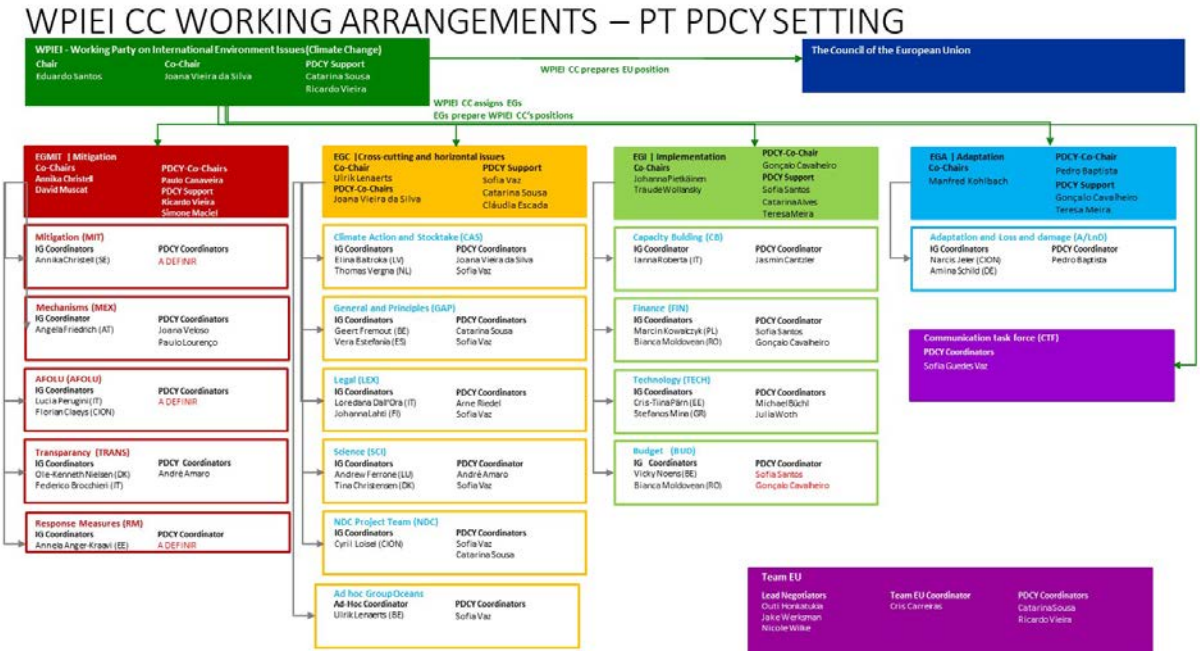
### 9.2.1 Negotiations/policy making institutional set-up

Negotiation and policy making EU-set-up for UNFCCC is structured under the special Working Party for International Environmental Issues – Climate Change (WPIEI CC). Member States are represented in the WPIEI-CC usually by national delegate (not the attachés following WP Environment).
Slovenia is in the WPIEI-CC represented by national UNFCCC focal point.
The WPIEI is than internally split into different thematic expert groups in order to follow the UNFCCC development regarding specific agenda items.
In principle two Policy officers from any Member states that express their interest, are presenting core EU team of specific agenda item, which is supported by working group (provide guidance to the negotiating team) that includes experts form all members states if they are nominated by the Member States and their nomination submitted to the Presidency and European Commission.

The workload under the WPIEI is distributed into four main clusters/ working groups:

- EGMIT – Expert Group for Mitigation
- EGC – Expert group for Cross-cutting and horizontal issues
- EGI – Expert Group for Implementation and
- EGA – Expert group for adaptation.

Then each expert group has further disaggregated to address specific issues. For illustration, under the upcoming Portuguese presidency the EU set-up under the UNFCCC is to be as follows:




From this organisational set-up under the WIPEI-CC it is obvious that individual Member State would need to have like 16 +different policy makers available for the following of the work of the EU under the UNFCCC. When it comes to some bigger EU Member states this is also the case however, usually Member States of a size of Slovenia simply don't have adequate capacity to be able to participate at the work of the EU at this level, which is noted with full understanding.

### 9.2.2 UNFCCC Policy implementation

#### *9.2.2.1 Reporting obligations as EU member state under the UNFCCC*

In principle al the reporting under the UNFCCC is regulated through provisions of the EU climate acquis, mainly through provisions of Monitoring Mechanism Decision (e.g. Energy and Climate Governance Regulation). From the perspective of obligation, the legal framework is duplicated with the clear purpose of ensuring full compliance through the European Commission Infringement procedures. It has to be noted that on the basis of the national submissions to the EU, the EC is preparing EU28 submission to the UNFCCC and any delays or non-compliance with regards to UNFCCC deliverables is not tolerated and alerts from Brussels are activated immediately, therefore the national GHG inventory system as described in this document is to function without any interruptions.

# 10 Annex 2 - Questionnaire

### 10.1.1 Questions related to the institutional set-up:

1. As an overall assessment, are transposition and implementation of the EU climate action acquis and UN documents adequately addressed in North Macedonia?
2. In order to perform your functions and tasks properly, does the legal basis of your institution/organizational unit and of your specific work need reformulating or strengthening?
3. In case of shared responsibilities between different institutions, are coordination and cooperation appropriately addressed in legal rules?
4. Is the overall coordination of climate action in government adequate? Are new or additional coordination mechanisms needed?
5. Does your institution cooperate with civil society (organisations)? How do you provide information about climate action to the general public?

### 10.1.2 Questions related to internal organisation:

1. Are there any gaps or duplication of work between your organizational unit and other units in regard to climate action?
2. Are there any problems of coordination among the different units within the institution in regard to the climate actions?
3. Is the existing internal organisation of your institution adequate or is restructuring needed in order to better address the climate changes issues? Are additional internal structures needed?

### 10.1.3 Questions related to existing capacity and identification of needed capacity

1. Is the systematized number of staff and type of positions (qualification and work experience required) in your unit adequate to address the climate changes process?

2. Having in mind that filling in all systematized positions in a short period of time is difficult, what position and / or profile of an employee urgently need to be filled-in?
3. Does your job systematization cover the requirements stemming from the climate changes processes? If not, what is missing?
4. Is there any task prescribed in your job position that has not currently been performed? If yes, why?
5. Do you perform only tasks that are described in your job description or you also cover other tasks? If yes, please give us the estimated amount of time (%) of your working hours you dedicate to each group of tasks.
6. Do you consider that you have the right competences to perform the tasks you have been allocated?
7. Have you attended sufficient and relevant trainings? What are your training needs?
8. Do you have sufficient and appropriate tools (hardware, software, etc.) to efficiently perform your tasks?

# 11 Annex 3 – Relevant documents

Relevant documents which were considered while preparing this report are the following:

1. Capacity building needs identified in the Technical analysis of the second biennial update report of the former Yugoslav Republic of Macedonia submitted on 5 March 2018. Summary report by the team of technical experts (https://unfccc.int/documents/193401)
2. Third ECE Environmental Performance Review published in 2019
3. The Self-Assessment Report prepared within the Capacity Building Initiative for Transparency/Global Coordination Platform
4. Handbook on institutional arrangements to support MRV/transparency of climate action and support
5. National Communications to the UNFCCC
6. Biannual Update Reports
7. Nationally Determined Contributions
8. Report on institutional analysis and assessment of administrative capacity needs for climate action (DRAFT)
9. Capacity and Training Needs Assessment for Transparency in Climate Change MRV on individual level
10. Report on Capacity Assessment of Climate Information Services in North Macedonia
11. Climate Budget Tagging relevant institutional capacity assessment

# 12 Annex 4 - Findings from the completed questionnaires from CBIT junior associates

Among the inputs the team used for formulating the specific proposals for strengthened administrative capacity were the answers from the questionnaires completed by the junior associates who are contracted by the CBIT Project and dedicated to the MoEPP and MoLSP. This annex presents the summarized findings from the answers provided to the questions related to administrative and personal capacities.

| Question | Yes | No | Partially | N/A | Conclusions |
|---|---|---|---|---|---|
| UN documents adequately addressed in North Macedonia? | 7 | | | | They all consider UN documents are adequately addressed. |
| EU obligations adequately transposed in North Macedonia? | 6 | | 1 | | They all consider EU obligations are adequately transposed, with exception for one who indicated a document that still needs to be transposed |
| Coordination and cooperation appropriately addressed in case of shared responsibilities between different institutions? | | | 6 | 1 | Weak cooperation and coordination based on the experience of the respondents. Better coordination of different nodal points is required. |
| Cooperation with civil society organisations as part of the work? | 2 | 3 | 2 | | Some of the posts do not entail cooperation with NGOs or employees have not experienced such a cooperation so far. Needs to be strengthened so that feedback from specialized NGOs is properly utilized |
| Provision of information about climate action to the general public? | | | | | Web site (www.klimatskipromeni.mk) and social media accounts |
| Gaps or duplication of work between your organizational unit and other units in regard to the climate action? | | 4 | | 3 | No gaps or dupplication of work experienced so far |
| Issues with coordination among different units within the institution in regards to the climate actions? | | 4 | 2 | 1 | In general, no coordination problems with minor exceptions |
| Additional internal structures (units) or restructuring of the institution needed in order to better address the climate chnages issues? | 3 | 1 | 2 | 1 | Divided opinions, not enough experience among them to provide firm answer |
| Systematized number of staff and type of posts (qualification and work experience required) in your unit adequate to address the climate changes process? | 4 | 1 | 1 | 1 | Divided opinions, but general opinion is that number of posts are sufficient, with a few exceptions |
| There are tasks prescribed for the post that are not currently performed? | 2 | 5 | | | In general, each performs all prescribed tasks, with minor exceptions for justified reasons |
| Performing tasks that are not described in your job description? Estimated amount of time (%) of your working hours you dedicate to those tasks? | 5 | 1 | 1 | | In general, they all perform other tasks that take up to 30% of the working hours, which indicates that job systematization should be improved to reflect the practice |
| Possesing right competences to perform the tasks you have been allocated? | 7 | | | | Current staff has the right comptences. Perception is of more focus on administrative tasks rather than thematic work. |

| | | | | | |
|---|---|---|---|---|---|
| Attended sufficient and relevant trainings? | 3 | 2 | 2 | | Opinions are divided, but in general number of trainings that have been attended is satisfactorily and trainings relevant, however there is a need for more specialized trainings |
| Having sufficient and appropriate tools (hardware, software, etc.) to efficiently perform your tasks? | 7 | | | | They all have sufficient and appropriate tools |
| Rate (1 to 10 at most) for each of the following areas in terms of reporting to the EU and the UNFCCC how much you can help according to your interests and experience: | Average | | | | |
| a. Inventory | 5,0 | | | | Apparently challenging area where there is certain knowledge and skills among the staff but not on a high level |
| b. MRV Platform | 6,1 | | | | The staff can be utilized for administering and processing data in the MRV platform |
| c. Mitigation plans | 6,1 | | | | The staff can be utilized in activities related to mitigation plans |
| d. Adaptation plans | 6,7 | | | | The staff can be utilized activities related to adaptation |
| e. Technical needs assessment | 3,4 | | | | The staff does not feel that it can assist much in technical needs assessment |
| f. Capacity building | 8,6 | | | | The staff can be very much utilized for capacity building related to these areas |
| g. Gender equality and social inclusion | 5,3 | | | | Knowledge on these issues is understandably higher among those working in the MoLSP then among the those working in MoEPP |
| Do you see yourself as an employee of the Ministry in 5 years? | 4 | 1 | 2 | | Opinions are divided, but in general they would all like to be Government employees, although still open to other job opportunities |