CLIMATE BUDGET TAGGING IN THE REPUBLIC OF NORTH MACEDONIA

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CLIMATE BUDGET TAGGING

IN THE REPUBLIC OF NORTH MACEDONIA

Background

Climate change represents a major development challenge as it is expected to cause substantial environmental, social, and economic damage. Actions are required to mitigate and adapt to the impacts of climate change in all aspects of the economy. Promoting climate-resilient development and reducing Greenhouse Gas (GHG) emissions are national commitments made in the Paris Agreement and expressed through the nationally determined contributions (NDCs). These obligations require reporting on the progress made towards the contribution of GHG reduction. Public sector activities relevant to climate change adaptation and mitigation are often scattered across a number of ministries. Tracking climate budget expenditure is important for monitoring and reporting.

The Republic of North Macedonia is preparing to initiate the process of integration of environmental, energy, and climate change issues into its national plans and budget in order to allocate climate-related budget in a more judicious way and simultaneously generate the information required for monitoring and reporting on the progress made on climate mitigation and adaptation. It has prioritized the continuous upgrading of existing monitoring and reporting systems for climate change as well as the upgrading and integration of policy. For this, the Republic of North Macedonia has planned to implement CBT by establishing criteria for identifying climate change related programmes / projects / activities as well as tracking climate-related expenditures in the national budget system.

The Climate Budget Tagging (CBT), which is a government-led process of identification, measurement, and monitoring of climate-relevant public expenditures, helps mainstreaming climate change in the PFM system in order to mitigate and adapt to the economic, social, and environmental impacts of climate change in a systematic manner. By marking budget lines, CBT enables estimating, monitoring, and tracking climate-related proportion of government expenditure allocated and spent to implement climate activities. Additionally, CBT also provides an entry point to track resources for sustainable development goals (SDGs), which is closely linked to climate change in achieving most of the SD goals as well as to mitigate activities linked to the NDCs.

This report has five sections. The first section presents a brief account of Climate Budget Tagging while the section II presents the institutional capacity in the country in mainstreaming climate change in the plans and budget in general and implementing CBT in particular. Section III presents the proposed road map for development and implementation of CBT methodology. Section IV gives typology used in defining climate activities and section V presents method of climate budget tagging including ways to assess level of relevance to climate change.

Section I

Climate Budget Tagging

This section presents a brief account of Climate Budget Tagging (CBT), its benefits, the process used in its development and execution as well as some country examples where CBT has already been introduced.

Addressing climate change require strategic planning, while on the other it will require substantial amounts of funding in addition to those available and accessible globally. Therefore, the role of limited domestic resources becomes equally important in implementing climate responses. A judicious allocation of resources to priority areas can only be made when budget decision-making processes are well informed about the vulnerable sectors and possible climate impacts.

However, climate change is a cross-cutting issue and public sector activities relevant to climate change adaptation and mitigation are often scattered across a number of ministries such as the ministries of agriculture, forest and water economy, transport and communication, economy, industry, and so on. This dispersion of climate change activities demonstrates a lack of ownership by concerned ministries and poses challenges for the Public Financial Management (PFM) system to facilitate planning, identifying, and reporting on climate change expenditure.

These challenges can be overcome by introducing Climate Budget Tagging (CBT), which helps mainstream climate change in the PFM system in order to mitigate the economic, social, and environmental impacts of climate change by identifying, classifying, weighting, and marking climate-relevant expenditure in the budget system.

The key objectives of implementing CBT are to achieve the following:

- i) identify CC budget being mobilized and report on CC-relevant spending;
- ii) enable the government to make informed decisions and prioritize climate investments;
- iii) enable public scrutiny on government spending on climate responses in order to improve accountability and transparency;
- iv) mobilize climate-related action across government sectors by providing evidence of on-going climate-related activities; and
- v) raise public awareness about climate change issues and government's climate responses.

Specifically, the CBT helps to achieve the above by helping:

- a. track climate expenditure for both mitigation and adaptation across sectors,
- b. monitor the level of integration of climate change in the system,
- c. allow the decision making process to be more informed of the problem and also of the progress made in each of the sectors affected by climate change, and
- d. generate information that helps strengthen institutional cooperation for data exchange which is relevant for the preparation of the inventory needed for producing national reports.

Several options to the CBT have been identified, including tagging based on priorities, functions and themes. Tagging of climate expenditures based on priorities offers the easiest solution; however, this tagging is project-based, not embedded into the system and, hence, unsustainable. A tagging system based on sectoral activity to capture climate expenditure across ministries is a much more robust system.

For this, the CBT needs to be mainstreamed into the budget system, which allows the budget system to generate information regularly. The role of the Ministry of Finance (MoF) becomes crucial to make it compulsory for line ministries to provide budget information related to climate activities in each of the sectors while making a three-year budget.

1.1 Development of tagging system

The development of a tagging system has three steps.

- Step 1: The objective and purpose of tagging is determined along with the mapping of climate change related policies and institutional context as well as the requirements and capabilities of the PFM system.
- Step 2: The method and criteria of tagging are finalized. Since the CBT system has to be used by all relevant ministries including, for example, the MoF, where officials might not have any particular background in climate change, the method designed has to be simple for users, yet robust enough to produce information required by planning and reporting agencies as well as by other users such as civil society organizations and the general public. Therefore, the design stage sometimes takes longer as it has to go through reiterative processes involving all stakeholders.

Two key aspects of the CBT design are:

- i) defining climate activities, and
- ii) identifying the level of relevance of climate expenditure.

It is relatively simple to define climate mitigation activities as they are universal, whereas defining adaptation activities are context-specific and therefore require some deliberation. It is best done by officials in the sector ministries as a group (often formed as a task force), so that the sector specific nuances are also captured by the definition.

With regards to the level of relevance, it is based on the proportion of climate budget in a programme budget. Usually, not all the budget of a programme identified as climate-related actually constitutes as climate budget. In some cases, a high proportion of the programme budget is climate related, while in many others, only a small portion of the programme budget is related to climate change. In order to capture this difference and identify even the lower portion of the expenditure, the CBT design uses ways of identifying the 'level of relevance'. The level of relevance is important to capture the lower proportion of the expenditure too.

Rio-marker is used to define and identify level of relevance for donor-funded climate projects, but it has limitations as it covers mitigation and therefore, countries have developed their own methods of defining climate activities and identifying the level of relevance of the budget involved.

Step 3: The third important aspect is to tag the budget lines of climate-related activities according to agreed relevance level. Though climate budget tagging in some countries is done by a team of experts after the budget has been proposed, this is best done by officials in the sector ministries who present the budget proposal to the Ministry of Finance (MoF). For this, the officials need to be given training on identifying the climate activity based on the agreed definition and tag the budget lines using the approved method and criteria. In fact, capacity building is required

at all stages across all climate related ministries and agencies but most importantly at the stage of tagging for the officials involved in climate budget tagging. Guidelines need to be developed explaining the process so that the officials can refer to them post- training, while tagging the budget annually.

1.2 Current practices of climate budget tagging

1.2.1 *Climate budget tagging in the Republic of North Macedonia*

The Republic of North Macedonia currently does not have a tagging system; however, it has carried out assessment of climate-related budget expenditures while preparing the Biennial Updated Report for the UNFCCC, by individual activities in the budget for the capital city Skopje, using the Rio Markers approach. International support was estimated on a project-based level, and was considered climate-related when climate change was the main purpose of the project. Accordingly, the City of Skopje, for example, implemented 37 climate-related projects in 2018-2019. The total amount of climate finance in 2018 was about 4.65% of total budget expenditure, while it increased to 5.17% of total spending in 2019 indicating a strong commitment by the City of Skopje to address climate change

1.2.2 **Examples of tagging from EU member states**

Budget tagging has already received wider recognition. Both France and Ireland have started using 'Green budget tagging' in order to promote programmes that help reduce greenhouse gas emissions and promote climate-resilient development (Paris Agreement). France has used a Green budget tagging system to identify expenditures along six objectives: climate change adaptation, climate change mitigation, biodiversity, circular economy, water, and air quality. These objectives are in line with the EU taxonomy regulation. Tagging is done by a team of experts in the Ministry of Ecological Transition (MoET) with validation carried out by line ministries. They tag activities and expenditure as, i) very favourable, ii) favourable, iii) favourable but controversial, iv) neutral, and v) unfavourable depending upon the environmental impact of the activity. France has started using the tagging system to identify expenditures that have negative impacts on the environment too.

In Ireland, a team of experts within the Department for Public Expenditure and Reform (DPER) conducts the initial green budget tagging process, in close coordination with the Departments of Communications, Climate Action and Environment. After the initial tagging, validation checks are conducted in subsequent rounds by line ministries. Unlike in France, the current system in Ireland captures only positive expenditures, although Ireland intends to introduce negative expenditure in the future.

1.2.3 Examples from outside EU

According to the review of international experience on the use of CBT (a World Bank report¹) since the introduction of CBT in 2012, 19 national and subnational governments (SNGs) have developed and implemented CBT. In Indonesia, the climate budget tagging is done for climate mitigation

¹ https://openknowledge.worldbank.org/bitstream/handle/10986/35174/Main-Report.pdf?sequence=1&isAllowed=y

expenditure. The existing government financial management and accounting system was assessed before developing a climate mitigation tagging system. Countries such as Bangladesh, Pakistan, and Nepal have used climate budget tagging to both mitigation and adaptation expenditures and across all sectors.

Many others are in the process of developing and implementing CBT.

Section II

Institutional Capacity Assessment

This section briefly provides results of a rapid assessment of the institutional capacity as well as policy context in the Republic of North Macedonia to implement the CBT. The Republic of North Macedonia, a non-Annex I party to the United Nations Framework Convention on Climate Change, has accorded high priority to the reduction of the impacts of climate change by reducing greenhouse gas emissions by 51% by 2030 compared to 1990 levels as indicated in its enhanced Nationally Determined Contributions (NDCs) under the Paris Agreement. The commitment is in line with the EU's commitment to a reduction of 55% by 2030. In addition, the government has also given utmost importance to environmental protection, green development, and sustainable economic growth in its strategic priorities.

Implementation of enhanced NDCs requires financing strategies that mobilize resources from national and international public and private sectors. Much of the international support received has been used to finance projects predominantly to mitigate the effects of climate change. Yet, the amount of support received is far from sufficient to meet the needs of undertaking other significant mitigation and adaptation activities to achieve green and resilient development. A significant portion of domestic funding is also mobilized to finance climate related activities. Most of the adaptation actions will need to be managed by national and subnational governments through their domestic budget systems. Therefore, a strong performance oriented domestic budget framework which integrates climate risks and reduces GHG emissions is required to provide the enabling environment to align national and international finances.

Despite being a non-Annex 1 country and a candidate member state to the EU, the Republic of North Macedonia has to adhere to EU Climate and Energy policies which assume the obligations of the UNFCCC Annex I countries to cut down emissions. Further, the country is also a Contracting Party of the Energy Community, which is rapidly advancing the implementation of EU regulations for monitoring, reporting and verifying greenhouse gases, and taking steps to tackle the climate crisis.

The following is a rapid assessment of institutional capacity in mainstreaming climate change in the plans and budget in general and implementing Climate Budget Tagging (CBT) in particular.

2.1 Objective

The main objective of this rapid assessment was to examine the institutional capacity of the ministries and agencies in the Republic of North Macedonia to implement climate budget tagging as well as integrate the tagging system in the national planning and budgeting processes across the sectors which are relevant to climate change in the Republic of North Macedonia.

2.2 Methodology

The rapid assessment of the institutional capacity was carried out by reviewing available documents relevant to climate change, GHG monitoring, expenditure reporting, national responses, plans, and other documents related to institutions, and policies guiding climate change response in the Republic of North Macedonia. The review also included budget tagging initiatives in some of the EU member states including France and Ireland. Other countries' experiences such as those of Indonesia were also reviewed where budget tagging is primarily done for climate mitigation activities and have been successful in using the results for promoting green bonds to raise money to implement climate mitigation programmes.

In addition, the UNDP's publication regarding climate budget tagging was also reviewed to get insights about the institutional requirement for introducing a climate budget tagging system. A list of documents reviewed is given in the annex. Personal communication with UNDP CO personnel and its national consultant also helped draw insights into institutional strengths and gaps for integrating CBT in the national Public Financial Management (PFM) system.

2.3 Policy context

The strategic framework for climate change at the national level includes strategic documents, national action plans, and programs that contain aspects related to climate change. National communications and biennial reports serve as climate change policy documents. Different aspects of climate change are integrated to varying degrees into sectoral laws at national level.

Currently, the Law of Environment guides the climate change activities including emission regulation and inventory of greenhouse gas emissions. According to the Law on Environment, the Ministry of Environment and Physical Planning (MOEPP) should establish, develop, manage and coordinate a national system for inventory of greenhouse gas emissions. The system would provide necessary information for the preparation of the Greenhouse Gas Inventory, as well as for the monitoring of the implementation of the National Climate Change Plan. However, the Law does not regulate in detail the issue of monitoring, reporting, and verification of policies and measures.

Under this law, significant progress has been made in mainstreaming climate change into policies in areas of energy, energy efficiency, renewables, transport, waste, and implementation of Agenda 2030. Different aspects of climate change mitigation are integrated to varying degrees into sectoral laws at the national level, but there is nothing about adaptation, though it is mentioned in official documents.

The National Climate Change Committee (NCCC), a coordination body that provides high-level support and guidance for overall climate change policies, is not functional due to frequent changes in governmental positions.

Long-term Strategy on Climate Action and Action Plan, as well as Law on Climate Action and two bylaws are currently being developed.

The Country is currently in the process of implementing the EU acquis enabling a low carbon emissions and climate resilient development. In the process of EU accession, new laws and policies have been adopted and regularly updated for constant harmonisation with the EU acquis.

2.4 Institutional Landscape

There are about 8 ministries performing activities that are directly or indirectly related to climate change in various ways. In addition, the sector for European affairs and the Cabinet of the Deputy Vice President for Economic Affairs also are related to climate change actions. National Hydro-meteorological Service and Crisis Management Centre are other agencies related to climate change. The government agencies and their climate-related function are listed in the table below.

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SN	Government agencies	Climate Change related responsibilities
1	Ministry of Environment and Physical Planning	 Monitoring the environment Protection of waters, soil, flora and fauna, air and the ozone layer from pollution Proposing measures for solid waste treatment
2	Ministry of Economy	 Proposing measures for development and ongoing economic policy in the areas of production, trade, tourism, hospitality services and handicraft
3	Ministry of Agriculture, Forestry and Water Economy	 Agriculture, forestry and water management; Monitoring and Studying the situation of water bodies, maintenance and improvement of water regimes; Hydrological and agro-meteorological measurements, as well as anti- hail protection; Studying and research of meteorological, hydrological and bio- meteorological events and processes
4	Ministry of Transport and Communications	 Promotion of other types of transport (cable cars and ski lifts, etc.)
5	Ministry of Labour and Social Policy	 Advancement of gender equality
6	Ministry of Education and Science	 Education and science of all types and degrees
7	Ministry of Information Society and Administration	 Development and coordination of policies related to human resources management training and professional development of state and public administrative officers
8	Ministry of Finance	 Preparation and execution of budget Macro-economic policy and policy for development of national economy Treasury system Fiscal decentralization
9	National Hydro- meteorological service	Generate hydro-meteorological data
10	Crisis Management Center	National platform for disaster risk reduction

The Ministry of Environment and Physical Planning (MoEPP) is a lead institution for climate action, which it carries out through the Unit for Climate Change under the Department for Sustainable Development and Investments, and the National Focal Point to the UNFCCC and the National Authority for the implementation of the Kyoto Protocol. It has a responsibility to monitor the environment, protect water, soil and biodiversity, and propose measures for solid waste treatment. The Ministry collects data in coordination with other agencies including the State Statistical Office, Ministry of Economy (MoE), Ministry of Agriculture, Forestry and Water Economy (MoAFWE), Ministry of Interior (MoI) etc. Strengthening the institutional cooperation for data exchange relevant for the preparation of the inventory is considered a key issue that would facilitate preparation of the national reports such as the Biennial Update Reports (BUR), National Communication (NC), GHG inventories, and Nationally Determined Contributions (NDCs).

According to the Law on Environment, the MoEPP is obligated to cooperate with several bodies of the state administration such as the State Statistical Office, Ministry of Economy, Ministry of Agriculture, Forestry and Water Economy, Ministry of Interior and so on to collect data. The ministry also has the mandate to oversee climate change reporting on national and international commitments. Currently, the Macedonian Environmental Information Centre (MEIC), which forms part of the MoEPP, plays an important role in monitoring and reporting especially regarding air quality, which it does through its Air Quality Monitoring Unit. Yet, the MEIC does not have a specific department or unit for climate action and the responsibilities are covered by the existing departments.

Therefore, it was indicated by previous assessments that the MoEPP should establish, develop, manage, and coordinate a national system for the inventory of greenhouse gas emissions including providing necessary data for the preparation of the Greenhouse Gas Inventory, as well as for the monitoring of the implementation of the National Climate Change Plan.

The National Climate Change Committee (NCCC) provides high-level support and guidance for the overall climate change policies in the country, while the Office of the Deputy Prime Minister for Economic Affairs is responsible for the achievement of the Sustainable Development Goals (SDGs) closely linked with climate change.

The Ministry of Economy (MoE) is responsible for policies in the production and tourism sectors, which are often impacted by climate change. The MoE and the MoEPP have the responsibility for implementing the National Energy and Climate Plan (NECP).

The Ministry of Agriculture, Forestry and Water Economy (MoAFWE) is responsible for management of agriculture, forest, and water resources. It is also responsible for collecting hydro-meteorological information and anti-hail protection. The Ministry of Transport and Communication (MoTC) deals with promotion of other types of transport such as cable cars, which are vital in promoting low carbon transport. Similarly, the Ministry of Labour and Social Policy (MoLSP) has a key role to promote gender equality, which is central to climate investments. Even though the Ministry of Education and Science (MoES) has no direct role in climate change, it is responsible for developing a curriculum which has the potential to incorporate climate change in the education programme.

Likewise, the Ministry of Information, Society and Administration (MoISA) has a role to play in developing the human resource required to promote climate responses in climate action delivery, which is one of the key areas of climate change mainstreaming in the national development plans.

The Ministry of Finance (MoF) is the key ministry to formulate macro-economic policy, prepare and execute the national budget, operate the treasury system and ensure fiscal decentralization, which are primary to climate finances.

The Research Centre for Energy and Sustainable Development, which is a part of the Macedonian Academy of Sciences and Arts, often prepares the assessments required for the national reporting to the UNFCCC. The university sector is involved in the assessment of sink and source of emissions focusing on agriculture, forestry and landuse changes (AFOLU) sectors. However, the engagement is project-based, generally with support from GEF and UNDP.

In most of the ministries mentioned above as being climate-related, there are no units/departments dedicated to climate change within and therefore some of the key works are carried out by agencies outside of ministries. For example, a network of climate change national practitioners from various relevant institutions, i.e. the Macedonian Climate Transparency network of national practitioners, has been established within the Capacity-Building Initiative for Transparency (CBIT) project to undertake sustainable transparency activities and facilitate reporting requirements to the UNFCCC.

The Macedonian Climate Transparency network of national practitioners has been established within the CBIT project. This network comprises 64 representatives from 27 governmental institutions and organizations, such as the NGO sector, academia, universities, and international organizations that implement complementary projects.

With regards to the Sustainable Development Goals (SDGs) - another national commitment linked with climate change - the National Council for Sustainable Development had identified five priority goals for the period 2018-2020, which included, among others, SDG 13, climate actions. A 2019 Rapid Integrated Assessment of the alignment of the national policy framework with the SDGs indicated that the existing policy framework addresses key aspects of sustainable development; however, it is crucial to establish the linkages of climate change with other goals by aligning them with the SDGs' programmes.

In order to establish the linkages, tools have been developed to generate both qualitative and quantitative information on the synergies and tradeoffs between the national enhanced NDCs and the SDGs for three key sectors (electricity and heat, buildings, and transport) individually and the overall impacts of three sectors of the enhanced NDCs on the realization of each of the SDG. The tools are simple enough to enable a broader engagement of various stakeholders.

Since the country has begun the process of EU pre-accession, it must now also adhere to the EU 2030 climate and energy framework, which includes EU-wide targets and policy objectives for the period from 2021 to 2030. The Republic of North Macedonia is also a Contracting Party of the Energy Community (EnC), which is rapidly implementing many policies that are directly related to the issue of MRV. The introduction of CBT will facilitate and expedite implementation of these policies by providing a tool for information generation

2.5 Climate Responses

As per the third BUR, Republic of North Macedonia has received both bilateral and multilateral funding support for climate change mitigation and adaptation projects. During the period 2018-2019, the country received international support of about 25.14 million USD to implement 38 climate related projects, of which 21 projects (15.6 million USD) were climate specific, while climate relevant projects received 9.5

million USD. The funds were in the form of grants, credit, and capital support. The country also received non-monetized support in the form of capacity building, technical support, and technology transfer. Rio marker was used for tracking the expenditure including the domestic financial flow.

At the sub-national level, the City of Skopje implemented 37 climate projects. Most of the climate finance in Skopje is implemented through two programs—parks and greenery (capital expenditure) and the environmental protection program. Skopje, in cooperation with the UNDP, has also developed a Climate Change Strategy to promote Climate Resilient Skopje.

2.5.1 Budget process

In line with the Law on Budgets, the government sets the budget priorities for the following year before the 15th of April. The MoF develops a Fiscal strategy for a mid-term period of three years based on the three-year plan of the budget-users of the central government, taking into account the budgetary sustainability for the mid-term period. The budget forecasts for the next 3 years have to be adopted by the 31st of May.

Once the budget forecast has been completed, the MoF sends the budget circular to the budget users of the central government by the 15th of June. The central level budget users are required to submit their proposed plan of programs by the 15th of July, so that the government can approve them no later than by the 15th of August. The budget circular to the municipalities is sent by the 30th of September, which allows the MoF to submit the proposed national and local budgets to the government no later than the 1st of November. The Government submits the budget to the national assembly in the middle of November for approval.

The Law on Local Self-Government and the Law on Budgets regulates the strategic planning at the local level. Accordingly, the budget users need to prepare a three-year strategic plan with programs and activities to meet the strategic priorities of the Government of the Republic of North Macedonia as well as the goals and priorities of the budget users.

The Republic of the North Macedonia has 80 municipalities, each of which work as a separate unit of local self-government, 10 of which comprise the capital of the country, the City of Skopje, which is a special unit of local self-government.. These municipalities have full autonomy in planning for future development by defining their own development goals that must be compatible and in line with the strategic priorities and goals mentioned in the Government Program while using funds from the State Budget.

It's worth noting that as the municipalities are independent in using their resources to synthesize development plans that best reflect local aspirations, municipal strategic plans are usually different because of the municipal differences. As a result, despite their competencies in urban and rural planning, a comprehensive system for local development planning does not exist. Also, the Law on Urban and Spatial Planning defines spatial planning as well as different types of local and municipal spatial and urban plans that are of importance for the municipalities during the process of strategic planning of their own overall development. This can become a problem in mainstreaming climate change in the local plans. Therefore, a CBT method using a standard methodology can help bring consistency in local level climate change planning.

2.5.2 Government expenditure classification

The government expenditure classification provides favorable conditions to mainstream climate finance and tracks its expenditure at the activity level.

The government expenditure is classified on the basis of organization, function, economic, and program classifications. There are eleven functions of government expenditure which include land management, economy, and environment management. The economic classification groups government expenditure based on the type of expenditure such as personnel, goods, capital, and social assistance.

In each of the government organizations and ministries, government expenditure is further classified based on program, activities, output, and component. A program is based on a vision, mission, task, and function of a ministry. It is normally set at the director-general level within a ministry and consists of several activities. Each program has one or many performance indicator(s) at the outcome level. An activity, a breakdown of programme, is carried out to produce outputs/sub outputs. Government expenditures, classified as components/subcomponents, provide detailed expenditure items to achieve outputs and sub-outputs. During the budget planning processes, all information needs to be provided to the Ministry of Finance, however, the actual realization of government spending within a given year is only reported at the activity or sub-activity levels.

The existing expenditure classification is favourable to introducing CBT as each of the programme is broken down into several activities in the budget system where tagging is done

2.5.3 Defining climate expenditure

Various types of expenditures such as climate change expenditure, climate related expenditure, climate resilience expenditure, climate driven expenditure, climate induced expenditure, and climate sensitive expenditure make the task of defining climate expenditure difficult. Though there is no single definition of climate change expenditure, it is generally understood any expenditure incurred in addressing climate change related activity comes under climate change expenditure.

The Republic of North Macedonia allocates a considerable amount of its own budget funds for financing climate activities, which needs to be increased to address growing climate risks.

2.6 Capacity Assessment

2.6.1 Institutional strengths that will help implementing CBT

a. The government of the Republic of North Macedonia has accorded high priority to climate change and is committed to meet its obligations under the Paris Agreement.
 The MoEPP has been made a lead ministry to organize and drive the necessary measures for climate actions including cooperating with other ministries and

institutions. The ministry also coordinates donor-funded programmes at the national level.

- b. At least eight ministries have some works and responsibilities that are, directly or indirectly, related to climate change. CBT will enable the ministries to track their climate change activities along with the budget allocation and expenditure.
- c. The climate expenditure information for the year 2018-2019 indicates that a significant amount has already been mobilized to address climate mitigation and adaptation projects.
- d. The rapid growth in climate change expenditure has demonstrated an increased capacity in climate change management and monitoring activities to fulfill the UNFCCC's requirements.
- e. Institutions such as the Research Centre for Energy and Sustainable Development have the capability to prepare the assessments required for the national reporting to UNFCCC.
- f. The climate mitigation budget is reported as part of BUP reporting; its strength is that a system, though in a limited way, has already been developed for budget tagging for reporting.
- g. The municipalities (the local governments) have the autonomy in planning their development programmes including climate responses. They prepare a three-year fiscal strategy which is compatible with national goals and programmes.
- h. The city of Skopje has implemented 37 climate projects during 2018-2019 and also has prepared the Climate Change Strategy, which indicates the capacity to plan at the local level

2.6.2 Gaps that need to be overcome for climate change mainstreaming

- a. Crucial gaps exist within the legal framework related to climate change. Currently, there is a partial climate policy to provide strategic direction and therefore, reporting is limited to obligation arising from the UNFCCC i.e. National Communications and Biennial Update Reports on Climate Change. The absence of a climate policy also makes it difficult to strategize the responses particularly in prioritizing mitigation and adaptation responses, and in identifying priorities for the ministries to allocate funds to address climate change.
- b. An institutional mandate to deal with CC is on MoEPP but it does not have a sufficient and qualified staff and therefore the government has to depend on a project-based approach to carry out assessment required for national reporting to UNFCCC.

- c. The municipalities are responsible for formulating development programs independently at the local level. In the absence of the statement regarding the responsibility of addressing climate change by municipalities and by the ministries, it is likely that the emphasis will only be on project-based mitigation activities and very few or none on adaptation.
- d. Some of the works of the Ministries of Economy, Agriculture, Forestry, and Water Economy, Transport and Communications, and Health are climate related, which is also reflected in the adaptation expenditure; these ministries need to be included in the planning and reporting on the expenditure. In the absence of that, a national level budget could not be provided due to incomplete information.
- e. Besides the MoEPP, which leads climate responses and coordinates donor funded programs at the national level, there are a considerable number of climate change-related programs carried out by other agencies that do not get reflected in actual climate activities. A striking gap exists in the existing institutional structure that does not provide information about climate finances other than mitigation.
- f. The current way of project-based tracking climate expenditure needs to be upgraded to consider all sectors including the domestic funding because adaptation is a big chunk of the domestic budget and needs to be tracked as it is quite important.
- g. There is a need to develop reporting mechanisms at the national level by enhancing staff capacity with necessary training, which can be achieved in the course of time by mainstreaming climate change in the system. The mainstreaming exercise would include several elements to enhance staff capacity from training to development of manuals and guidelines to help the staff generate information for reporting.
- h. The lack of specific departments/units for climate action in the ministries is a challenge to an effective cooperation in climate responses. It can also be an obstacle for the MoEPP—the main institution responsible for climate action—to organize and drive the necessary measures, which requires cooperation within the government. Without adequately mandated, staffed, and equipped partners, it is difficult to achieve climate goals.
- i. At the government level, there is a lack of a permanent technical team for the development of the reports. Additionally, there is low capacity in the systematization of quality information and timely delivery for the reports. A lack of adequate specific structures and resources in terms of sufficient and qualified staff illustrates the constrained capacities of the Ministries on climate change. This will likely pose an obstacle to an effective cooperation in climate action among the ministries

Section III

Roadmap for implementing CBT

The section presents a roadmap to develop and implement CBT to integrate climate budget in the public budget of the Republic of North Macedonia in order to mainstream CC in the public finance management (PFM) systems. As CBT is encompassing, the role of the MoF becomes crucial to make it compulsory for line ministries to implement CBT and provide budget information related to climate activities in each of the sectors while making a three-year budget.

3.1 Developing and executing CBT

Developing and implementing CBT will be done in three steps. A brief account of activities to be introduced under each of the steps are as follows:

3.1.1 Step 1: Setting up CBT

What to do	When	Supporting agency	Role of UNDP
3.1.1.1 Identifying priority sectors	Jan - April, 2021	MoEPP	Technical assistance
3.1.1.2 Identifying relevant ministries and agencies	Jan - April, 2021	MoEPP	Technical assistance
3.1.1.3 Scoping of CBT	Jan - April, 2021	MoEPP	Technical assistance
3.1.1.4 Reviewing budget and account code structure	Jan - April, 2021	MoEPP	Technical assistance

A summary of activities under setting of CBT are discussed below:

3.1.1.1 Identifying priority sectors

While some activities can be identified as climate responses based on their explicit objectives such as reducing carbon emissions in transport and energy sectors, there are many activities across other sectors that may not have an explicit climate-related objective, such as reducing carbon emissions. Their implementation nevertheless has significant impacts on climate change particularly with regard to adaptation. The tagging exercise will cover all sectors that are relevant to CC mitigation and adaptation.

All the sectors indicated as climate relevant in the national communications and biennial update reports have been identified for tagging. The law on the environment provides the legal basis to affirm climate sectors.

3.1.1.2 Identifying relevant ministries and agencies

A review of the institutional landscape showed that at least 8 ministries at the national level are mandated to implement CC related activities. Additionally, the Cabinet of the Deputy Vice President for Economic Affairs and the sector for European Affairs are also involved in climate actions. At the subnational level, the municipalities plan and implement CC related activities independently as per their needs.

With regards to the current capacities of ministries for undertaking and implementing CBT, they have implemented donor funded climate projects that focus on climate mitigation, but they also implement development activities that have a significant impact on climate change in supporting mitigation or adaptation or both. Mapping of ministries and agencies has been carried out to assess their involvement in implementing CC related activities who will also need to use CBT.

The Ministry of Environment and Physical Planning (MoEPP) leads climate responses and coordinates donor funded programs at the national level. Though the institutional mandate to deal with CC is on the MoEPP, it does not have a sufficient and qualified staff. Besides, there are a considerable number of climate change-related programs carried out by other agencies that do not get reflected in actual climate activities. Sector ministries implement most climate-related programmes and therefore the MoEPP will need to provide effective coordination in the planning, budgeting, and implementation of climate responses. A striking gap exists in the current institutional structure that does not provide any information about climate finances other than mitigation.

The key stakeholders in introducing CBT will be:

- a. the MoEPP and line ministries which will be using the tagging system at the sectoral level;
- the MoF will be coordinating the CC budget and providing overall guidance during budget formation prioritizing CC as well as making provisions in the budget system to allow entry of climate tagging;
- c. municipalities, which will be using the tagging system at the municipal level, and;
- d. the UNDP which will provide technical assistance and back-up support during development of CBT system and its implementation.

3.1.1.3 Scoping of CBT

The cross-cutting nature of CC makes it difficult to manage climate responses through a single line ministry. Addressing CC becomes further complex when climate change related programmes implemented by national and subnational governments are taken into consideration. The scope of CBT needs to cover all of government activities from the national to subnational in order to generate more comprehensive information. Generating information on CC responses and expenditure from the national to subnational levels and across all relevant sectors requires a significant amount of capacity building across sectors and at various levels within sectors; it is desirable to cover all sectors, even if it means doing it in phases from the national to municipal level.

The second issue that needs to be addressed while scoping is to determine how to proceed with tagging. Given the objective of CBT to institutionalize tracking of climate related expenditure, its technical design and implementation need to be grounded in the existing PFM system. Therefore, the following has been proposed.

- CBT will be assigned by the line ministries and agencies
- Provisions will be made in the budget templates to incorporate the CC dimension

• MoF will review / validate the tagging before presenting it to the national assembly for approval.

3.1.1.4 Reviewing budget and account code structure

It must be ensured that the chart of accounts (CoA) has a field that can be used for cross-cutting policy themes. Usually the Gender Responsive Budget (GRB) has already used the CoA for tagging gender budget in the programme. The same approach will be adopted to execute CBT without changing the CoA structure.

What to do	When	Supporting agency	Role of UNDP
3.1.2.1 Defining CC activities	April – June, 2021	MoEPP	Technical assistance
3.1.2.2 Development of typology	April – June, 2021	MoEPP	Technical assistance
3.1.2.3 Develop criteria and method of tagging	April – June, 2021	MoEPP	Technical assistance
3.1.2.4 Assessing and weighting the level of relevance of CC budget	April – June, 2021	MoEPP	Technical assistance

3.1.2 Step 2: Formulating technical design

3.1.2.1 Defining climate change activities

Generally, CC activities are defined using the Rio Marker, as proposed by the OECD, which provides definitions of CC mitigation and adaptation activities. However, it is important to note that this may require defining CC activities according to the national needs. The national communication and TBUR have identified the CC related sectors including the ministries and programmes, which will be taken as guidance for identifying what is and what is not climate relevant from the list of existing and potential CC related programmes. The experiences from other countries show that they have defined climate change expenditure according to their own needs. It is crucial to have consensus among relevant ministries and sectors to agree on the definition as they form the basis for all other actions of tagging and so that no activity under any potential sector is left out. Discussions will be held with sector ministries to fine-tune the definition of climate related programmes.

3.1.2.2 Development of typology

Climate-related programmes and activities will be grouped under typologies which enable the differentiation between mitigation and adaptation activities at the tagging stage. The use of typology will simplify the tagging system for the officials who execute the system; the typology already defines which activities under the sectoral programmes are climate related and what climate objective they serve.

Use of typology will provide an opportunity to reinforce the implementation of the national plan by mapping expenditure to priority areas, identifying gaps and imbalances, and integrating financial and non-financial monitoring.

3.1.2.3 Develop criteria and method of tagging

Once CC activities are defined, the next step is to develop a method of tagging; this depends on how the level of relevance of any programme to climate change is determined. Two technical approaches to define relevance level of the climate-related programme have been proposed—the objectivesbased approach and the benefits-based approach. In the objectives-based approach, level of relevance is determined by an assessment of the relevance of a programme's stated objectives or its main contribution. It is based on the CPEIR climate relevance index where the objective of the programme is mapped using expert judgement. The method is fairly straight forward and can be introduced across ministries with short trainings for the officials doing the tagging. The approach has its limitations as it uses a range of expenditures to categorize the level of relevance.

The benefits-based approach involves applying a benefit cost ratio, where the level of relevance is determined by analysing the climate benefits of the proposed programme. The approach requires adequate data regarding the benefits which are often not available for analysis for many programmes.

Since the objectives-based approach is simpler compared to the benefit-based approach and can be introduced with short training, it is proposed to use the objective-based approach of CBT to begin with.

Tagging will be done at the programme level, which is comparatively easy and accurate for mitigation activities as most of the budget for such programmes is related to CC, whereas in most adaptation-related programmes, it is likely that the programme budget will also include the non-climate budget. This can be addressed by improving the method and to tag it at the activity level as the ministries and agencies get familiar with the tagging process.

The recurrent budget is generally non-climate related and isn't counted in the climate budget assessment, but some of the recurrent budget can also be related to climate change; for example, expenditure related to training on CC issues or developing a curriculum for the inclusion of CC in the education. There may be other examples too. Developing criteria for what will be tagged will also be finalized.

3.1.2.4 Assessing and weighting the level of climate change relevance budget

Not all CC activities identified as such have the same budgetary components that are relevant to CC actions. For some CC activities, most of the budget is related to CC, while for others it may only be a portion of its budget that's related to CC. Since the aim of CBT is to capture the CC related budget, it is important to identify the actual CC related budget as far as possible. This will be sorted out by providing weightage to the activities and grouping them based on the level of relevance.

A method has been developed in which programmes with a clear focus on climate change will be classified as highly relevant, whereas programmes that have links to climate change objectives will be

considered of medium relevance. Programmes that are related to the medium relevant expenditures but not directly linked to climate change will be considered to be of low relevance items.

3.1.3 Step 3: Design execution

Instead of taking few ministries and implementing CBT as pilot programme, it is proposed that the CBT method be adopted at the national level in all climate relevant ministries and agencies and gradually roll it out to the subnational level based on the experience at the national level. Since municipalities independently plan their development programmes at the local level, it is important to track the climate-relevant programmes planned and implemented by municipalities, which forms a significant part of climate responses in aggregate. Implementing CBT by taking all ministries together will help understand the difficulties of different sectors within a short period and allow making the required adjustments to make the CBT effective rather than taking few ministries and continue to roll it out to the other ministries.

The climate budget tagging system has been developed in such a way that the tagging is done by programme and budget planner at the sector ministers and agencies from where the programme and budget formulation process begins. Tagging is best done while the programmes are being proposed in the annual plan by the respective ministries and agencies. However, the budget for the year 2021 has already been prepared and therefore tagging before the programmes are proposed cannot be done for this year. Therefore, it is proposed to carry out the execution of the CBT in two phases.

3.1.3.1 Phase 1: Year I (2021)

Since the climate budget tagging method has already been developed, it will be an excellent opportunity to begin introducing the tagging system by tagging climate-related programmes at the MoF, a key agency not only in managing finances but also reporting on expenditure, where programmes with proposed budget from all sectors await approval. To tag the programmes when they are at the final stage of approval, it is suggested that IT-based provisions be made in the budget system to indicate climate relevance of all climate-related programme based on the tagging method developed with UNDP's assistance and tag them. Once introduced, the IT-based provision will make it easy to mainstream the tagging system in the budget system. The following activities will be carried out in the current year.

What to do	When	Who	Supporting agency	Role of UNDP
3.1.3.1.1 Creating climate marker	June 2021	MoF	MoEPP	Technical support providing IT services to make provisions in the budget system
3.1.3.1.2 Connecting with MoF system	June 2021	MoF	ΜοΕΡΡ	Technical support providing IT services to make provisions in the budget system

3.1.3.1.3 Orientation to				
the desk official	June 2021	MoF	MoEPP	Support conducting training
responsible for tagging				
3.1.3.1.4 Tag the climate-	July 2021	MoF	Sector	Back up support
related programmes	July 2021	NOF	ministries	Back up support

3.1.3.1.1 Creating climate marker

Climate-related activities will be indicated by markers 1, 2 and 3 indicating different levels of relevance of climate programme in question to CC. The marker 1 denotes **highly relevant** followed by 2 which is **"medium of moderately relevant**" and 3 as **"low or marginally relevant**".

3.1.3.1.2 Connecting with MoF system

Provisions will be made in the budget system to introduce climate budget tag by developing a IT-based system. Integrating CBT with the budget information system will be more encompassing and robust in providing information about climate-related budget. Therefore, a provision has to be made to mark the climate programmes in the budget information system. The provision will need to have two options with drop down menu:

- I. to mark whether the programme is contributing to one of the three **climate objectives** mitigation (1) or adaptation (2) or both (3), and
- II. to mark the programme with one of the three levels of **climate relevance** as highly relevant (1), moderately relevant (2) or marginally relevant (3).

It is important to make the provision IT-based to make it efficient and effective and facilitate the sector officials to tag the programme with ease.

3.1.3.1.3 Orientation to desk officials responsible for tagging

After the provisions to tag the programme in the budget system have been made, the officials who are managing the budget information need to be given orientation in tagging the programme. The orientation will be focused on tagging each climate-related programmes based on their climate objectives as indicated in the typology as well as defining the climate objective. The support of experts from sector ministries for determining the scope and objective of the climate change programme proposed by the respective sector will be sought when required during orientation

3.1.3.1.4 Tagging climate-related programmes

The task will primarily involve expert judgement at this stage because the objective of the climaterelated programmes may not be as clear to the officials at the MoF as it would be for the sector ministry officials. Therefore, it is also suggested to seek help of the sector ministry official to define and objective of the programme before tagging them. Tagging the final programmes at the MoF this year will provide the following benefits:

- help establish a benchmark for next year within MoF with indications of what is expected of the sector ministries when they will tag climate related programmes next year before the programmes are proposed.
- help make the necessary adjustments if found necessary while making the provisions for the introduction of the climate relevance of all climate-related programme in the budget system.
- help specify the need for budget tagging in the budget circular next year well in time.
- guidance notes to be prepared to help sector ministries to tag their programme can benefit from this years' experience of budget tagging.

3.1.3.2 Phase 2: Year II (2022)

The tagging system will be rolled out into all relevant sector ministries and agencies in the year 2022. Actual tagging will be done before the sector ministries and agencies prepare their budget and programmes to be submitted to the MoF. As the sector ministries and agencies differ in their sectoral responsibility and have varied expertise within their organizations, the rollout of the tagging system should be done taking these differences into consideration. The following actions will help achieve the implementation of CBT at the sectoral level.

What to change	When	Who	Supporting agency	Role of UNDP
3.1.3.2.1 Preparation of guidance note	August 2021	MoF	All sectoral ministries and agencies	Provide technical assistance
3.1.3.2.2 Communication to the sectors by sharing road map	Sentember		MoEPP	Backup support
3.1.3.2.3 Capacity building	October 2021	MoF	All sectoral ministries and agencies	Technical logistic support
3.1.3.2.4 Policy brief with recommendations for policy makers.	November	MoF	All sectoral ministries and agencies	Backup support
3.1.3.2.5 Budget circular	June 2022	MoF	MoEPP	Backup support

3.1.3.2.1 Preparation of guidance note

A guidance note will be prepared as a quick reference to facilitate the tagging process for those who are tagging the CC related budget in sector ministries and municipalities. The guidance note will highlight key issues such as the definition of CC programmes, including the method of building typology, criteria to assess the level of relevance, the tagging method, as well as how it is to be implemented while formulating the budget. It will also explain the benefits of using CBT and how it helps to generate climate budget information at the national level. While preparing the guidance notes, the experience of the tagging in 2021 as proposed in stage 1 above) will also be taken into consideration.

3.1.3.2.2 Communication to the sectors by sharing road map

Sector ministries will be informed of the plan to introduce CBT at the sectoral level by communicating and sharing the roadmap. The purpose of sharing the roadmap is to create an understanding among sectors of their role in implementing sectoral budget tagging and explore potential areas for synergy as climate actions are generally cross cutting and provide opportunity fro synergy. If required, further timetable for the implementation of CBT at the subnational level will also be developed and shared, which will help prepare the agencies in advance.

3.1.3.2.3 Capacity building

Who will be trained?

Planning and budget officials from the sector ministries and agencies will be trained. Two to three officials from each ministry and agency will be invited to the training. Efforts will be made to encourage women officials to participate in the training.

Training content

The training model and its content will be developed in consultation with MoF and MoEPP as the former is responsible for budget formulation process and will have its own experience of introducing CBT (as proposed to be carried out in stage 1 above), while the later coordinates the implementation of National Climate Change Plan.

Training duration

The training will be conducted for two days.

- i) The first day will be dedicated to presenting background information on climate finance, national commitments to the Paris Agreement, the need for tracking climate budget, its linkages with SDGs, and NDCs and so on.
- ii) The second day will be dedicated to the CBT method and how it will be used by sectoral ministries. An IT expert and a budget official from the MoF will also be invited as resource persons to explain how entries are made in the budget and how tracking of climate finance is coordinated by the MoF to generate information on climate budget expenditure.

3.1.3.2.4 Policy brief with recommendation for policy makers

A policy brief will be prepared with recommendation for further actions to improve accuracy of climate budget assessment as well as strategy to cover subnational level. The brief will also take the experience gained during the implementation of CBT in its first phase and incorporate the learning to make the process more effective.

3.1.3.2.5 Budget circular

The MoF issues a budget circular to the budget users at the central level by the 15th of June and to the local level by the 30th of September. The budget users submit the Draft-plan of development programs

harmonized with the guidelines of the circular and submitted to the Government of the Republic of Macedonia for approval no later than 15th July of the current year that the government can approve them by no later than the 15th of August in the current year. The budget circular provides broad guidelines on the budget process that the sector ministries need to follow before presenting the plan of proposed programmes. Budget users prepare a draft Budget Request for their activities covered in programs and sub-programs, in accordance with the instructions and guidelines contained in the Budget Circular, which they submit to the Ministry of Finance, no later than September 1st of the current year.

The budget circular in 2022 will also include a section providing instruction to use CBT at the sectoral level and make CBT mandatory for the sector ministries.

3.2 Linking CBT with SDGs, ENDCs and Disaster Risk Reduction

CBT will be integrated in the PFM system and therefore will capture all expenditures made through the programmes that are on-budget-on-treasury including projects funded by international sources under SDGs, ENDCs and DRR. The PFM system will generate information required to prepare expenditure reports. The CBT method has been designed in such a way that it can help produce separate budget and expenditure information for mitigation, adaptation, and mixed programmes that have both mitigation and adaption functions. It will also help assess the climate budget within the national budget thereby facilitating planning for financing various climate responses and assess any funding gaps that may need to be addressed.

Sustainable Development Goals (SDGs)

With regards to the SDGs, the climate change related programmes are generally linked with one or more of the SDG goals. The climate budget information will therefore help assess part of the SDGs funding supported through the national budgetary framework.

The proposed method of CBT provides opportunity to examine indicative linkages of climate programmes contributing to respective SDGs. Since the same planning or budge officials who will tag the climate budget at the sector ministries will also be managing SDGs programmes, it will be logical for the officials to indicate the linkages of all climate programmes with SDGs. Though it will not give a complete picture of all SDGs funding as not all SDGs related programmes are climate related, the CBT exercise will provide a base for assessing how and which SDGs have been supported by the climate budget.

Enhanced Nationally Determined Contributions (ENDCs)

One of the important obligations under the Paris Agreement is to report on the progress made in the proposed commitments under the ENDCs. The key sectors which contribute to ENDCs include energy, transport, industry, waste, and agriculture, forestry and other land use (AFOLU). Most measures in the energy sector will be financed by the private sector, which is likely to be outside the PFM system, and will not be captured by CBT. Renewable energy generation paid for mainly by the private sector will also be outside the PFM system. Expenditures made under those programmes will have be monitored through a separate mechanism; however, the regular development programmes also include many

mitigation programme or those that have both mitigation and adaptation functions. Carbon sequestration programmes or cost incurred in introducing electric vehicles or decommissioning coal plants are some of the programmes that are funded through the national budget system. Such expenditure will be captured by CBT for reporting.

Likewise, subsidies and loans, provided for various energy programmes including energy efficiency funds when established, will be borne by public funding. Some funds will be made available for circular economy action plan and biodiversity strategy. These and many other programmes funded through the budget system which will be captured by CBT.

Furthermore, resources currently available from the EU and other sources are far from sufficient to accelerate GHG reduction measures. Mainstreaming CBT in the budgeting process will felicitate engagement with key ministries and agencies at both national and subnational levels thereby increasing the domestic and international fiscal support for climate change responses. It will help improve the financial track record by enhancing accountability and transparency in the delivery of climate finances, which is helpful in increasing international funding by making the financial system more credible for which CBT can pave ways in a systematic way.

Disaster Risks Reduction (DRR)

DRR has become a key concern due to rising threats of climate change. Increasing cases of extreme hydrological events like floods and droughts are the most common threats to the already fragile agriculture and local rural economies. Measures, such as establishing early warning systems, programmes to promote preventive action and post-disaster recovery, are crucial to minimize the damage due to disasters. Funding for these activities to enhance the resilience of communities to such impacts is also far from adequate. More funds need to be mobilized to address DRR. Expenditures related to DRR activities will be captured well by CBT as such activities have been identified in the typology as related to climate change. The information generated will help plan for robust DRR measures by assessing gaps and mobilizing required funds.

3.3 Proposal to include climate budget information in the MRV

According to the Law on Environment, the Ministry of Environment and Physical Planning (MOEPP) should establish, develop, manage, and coordinate a national system for inventory of greenhouse gas emissions. This system will provide the necessary data for the preparation of the Greenhouse Gas Inventory, as well as for the monitoring of the implementation of the National Climate Change Plan. The data generated will fed into the MRV system to report on various dimension of climate change responses.

Even though the Law of Environment does not regulate the issue of monitoring, reporting, and verification of policies and measures in detail, the third BUR, in addition to the national GHG inventory information, has included important information regarding climate change knowledge and people's perception, mainstreaming gender in climate change, education and climate change, and advances in achieving SDGs and so on. Technical, financial, and capacity needs are other key areas that the report covers. Constraints and resources gap are essential components of the MRV report.

In order to make the national reports more comprehensive, it is proposed that the report should include a section on climate budget information as well. The CBT-generated climate budget

information should provide insight into budget allocation for mitigation, adaptation under various sectors including the funding sources. It will also help build understanding of the enormity of climate issues and how institutional cooperation can be further strengthened for more effective mobilization of climate funds. The financial management system will provide budget allocation and expenditure information to be included in the report.

3.4 Amendment in Law

The Law on Environment currently regulates the issue of monitoring of anthropogenic emissions by sources and sinks of greenhouse gases. However, the Law on Environment does not yet regulate the issue of climate finance and its tracking. Mobilizing and managing climate finance is crucial for effective climate responses. Unless it is legally binding, tracking climate budget in the national budget will not be effective and sustainable. The Republic of North Macedonia has accorded high priority to climate legislation aligned with the EU acquis to enable future sustainable development. It has initiated the process of developing a comprehensive Law on climate action as well. Therefore, it is recommended to explore the possibility of making CBT a legally binding part of the budget formulation process for more coordinated climate action.

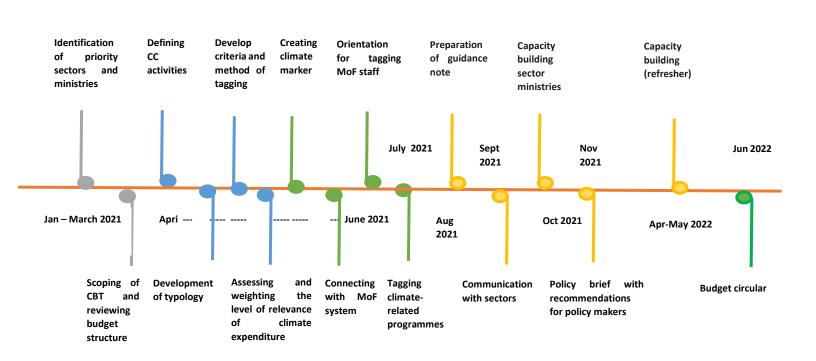
3.5 Timeline

Ste	Steps Roadmap for CBT implementation					2021					2022	
		Months	Jan- Mar	Apr- Jun	July	Aug	Sept	Oct	Nov	Apr	May	Jun
<u>ج</u>		Identifying priority sectors										
8		Identifying ministries and agencies										
Setting of	5	Scoping of CBT										
Ň		Reviewing budget and account code structure										
_		Defining CC activities										
Technical	L B	Development of typology										
echnica design		Develop criteria and method of tagging										
⊢ ⊢		Assessing and weighting the level of relevance of CC budget										
		Creating climate marker										
	ar	Connecting with MoF system										
Design Execution	Year	Orientation for tagging MoF staff										
scut		Tag climate-related programmes										
L H		Preparation of guidance note										
igi	=	Communication with sectors										
Des	Year	Capacity building sector ministries										
	⊁	Policy brief with recommendation for policy makers										
		Budget circular										

The CBT will be implemented in two phases as indicated below:

3.6 Planned dated for execution

The following roadmap shows the planned dates for the proposed activities.



Section IV

Typology formulation

Responding to climate change involves two possible approaches: reducing and stabilizing the levels of greenhouse gases in the atmosphere and/or adapting to the impacts of climate change that are already affecting various economic sectors. The UNDP's CPEIR methodological guidebook recommends classifying climate expenditure based on these two approaches: mitigation and adaptation activities which are also mentioned in the national climate change policy priorities. Since the Republic of North Macedonia is already committed to responding to climate change, many of the programmes in its annual plan are, to a large extent, relevant to climate change as they address mitigation and/or adaptation. The climate-relevant programmes as seen in the annual programme of 2021 will be used to formulate typologies based on the following definitions of mitigation and adaptation for climate budget tagging.

4.1 Definition

Climate Change mitigation activity:

As per the "Rio Markers" developed by the OECD-DAC, an activity can be classified as climate-changemitigation related if it contributes to the objective of the stabilization of greenhouse gas (GHG) concentrations in the atmosphere by reducing or limiting GHG emissions or to enhance GHG sequestration. The mitigation activity contributes to: a) limiting anthropogenic emissions of GHGs, including gases regulated by the Montreal Protocol; or b) the protection and/or enhancement of GHG sinks and reservoirs.

Climate Change adaptation activity:

Likewise, an activity should be classified as adaptation-related if it intends to reduce the vulnerability of human or natural systems to the current and expected impacts of climate change, including climate variability, by maintaining or increasing resilience, through increased ability to adapt to or absorb climate change stresses, shocks and variability and/or by helping reduce exposure to them. This encompasses a range of activities from information and knowledge generation, to capacity development, planning, and the implementation of climate change adaptation actions.

4.2 Formulation of typology

A typology helps us classify climate related programmes according to their general objectives. The purpose of creating a typology is to facilitate the ministries and agencies to identify climate related programmes in their annual plans for tagging. For this purpose, a set of typology, with a more granulated list of climate responses based on the above definition and in line with following broad outline, has been formulated after reviewing the climate change related programmes for 2021 of all relevant ministries in the Republic of North Macedonia. The following presents the typology under

mitigation and adaptation. The details of potential activities for each ministry are presented in the annex.

4.1.1 Climate change mitigation as principal objective

4.1.1.1 Criteria

The activity that contributes to

- a) the mitigation of climate change by limiting anthropogenic emissions of GHGs, including gases regulated by the Montreal Protocol; **or**
- b) the protection and/or enhancement of GHG sinks and reservoirs; or
- c) the integration of climate change concerns with the countries' development objectives through institution building, capacity development, strengthening the regulatory and policy framework, or research; **or**
- d) developing countries' efforts to meet their obligations under the UNFCCC.

4.1.1.2 Mitigation typology and relevant areas

The following activities can be considered as mitigation activities:

SN	Typology	Relevant areas				
1.	Improving or building new	Reduction of losses in electricity and heat networks, electricity				
	infrastructures	transmission interconnection				
2.	Energy efficiency measures in	Residential/commercial/public buildings, heat pumps, district				
	buildings	heating, efficient lighting systems, efficient street lighting				
3.	Energy efficiency measures in					
	Industry					
4.	Energy efficiency measures in	Railway, highways, improved mobility, transport modal shift,				
	transport	electric vehicles, charging infrastructure, renewing vehicles fleet				
5.	Renewable energy	Hydro power plants, biomass power plants, solar, biofuel, on-farm				
		bio-digester, photovoltaic irrigation				
6.	Gasification					
7.	Circular economy	Rremanufacturing, refurbishing and recycling, minimizing				
		leakages				
8.	Waste management	Landfill gas flaring, composting, recycling, waste selection,				
		landfills, mechanical and biological treatment				
9.	Waste water treatment and					
	management					
10.	Reduction of emissions in	Modification of the feed composition and nutrition practices,				
	agriculture	manure management, increase of soil organic matter, prevent				
		fields burning				
11.	Protection and enhancement of	Sustainable forest management, forest fires prevention,				
	sinks and reservoirs of GHGs	afforestation and reforestation, rehabilitation of areas affected by				

	drought and desertification, land use change, erosion reduction
	measures, land restoration, avoided land degradation, biochar

The following horizontal activities can also be considered as mitigation actions if they are related to the areas stipulated above:

SN	Typology	Relevant areas
12.	Policy and strategic planning on national/local level	Development of studies, assessments, strategies, plans and programmes, vulnerable groups, gender, biodiversity
13.	Legal & Regulatory framework	Development/update of laws, by-laws, rulebooks and similar, green procurement, just transition, Pursue regional electricity market integration, vulnerable groups, gender, circular economy
14.	Monitoring, Reporting, Verification and Transparency	Cut across all areas
15.	Capacity building	Human and institutional
16.	Transfer and promotion of technologies and know-how	
17.	Training	Social programmes, just transition
18.	Education	
19.	Public Awareness	
20.	Communication	
21.	Research and Innovation	Energy transition technologies and measures and soil carbon storage
22.	Banking and financial services	Credits, loans, insurance
23.	Business and other services	Preparing and supporting private investment on a public-private partnership basis
24.	Financial and fiscal measures	Incentives, taxes, feed-in tariff, premiums, co-financing, just transition, vulnerable groups

4.1.2 Climate change adaptation as principal objective

4.1.2.1 Criteria

The activity that contributes to

- a) the climate change adaptation/resilience objective is explicitly indicated in the activity documentation; and
- b) the activity contains specific measures targeting the definition above

4.1.2.2 Adaptation typology and relevant areas

The following activities can be considered as adaptation activities:

SN	Typology	Relevant areas
1.	Health	Waste management standards
2.	Agriculture	Promoting heat and drought resistant crops and water saving irrigation methods to withstand climate change
3.	Food	seed bank, pest control
4.	Livestock	Veterinary health, improved cattle feed
5.	Forestry	afforestation, reforestation, diverse mix of forest management practices and species preservation, watershed management, protected area, greenery of highway
6.	Biodiversity	
7.	Water and sanitation	Water conservation, improving water management, water infrastructure
8.	Land management	Landuse plan, rehabilitation of degraded land, soil management
9.	Disaster prevention and preparedness	floods, drought, heat/cold waves, flood prevention and management and erosion control
10.	Nature based solutions	Resource restoration
11.	Tourism	Infrastructure, rehabilitation of premises, home tourism
12.	Cultural heritage	
13.	Built-in infrastructure	
14.	Spatial/Urban planning	
15.	Urban resilience	

Following horizontal activities can also be considered as adaptation actions if they are related to the areas stipulated above:

	Typology	Relevant areas
16	Policy and strategic planning on national/local level	Development of studies, assessments, strategies, plans and programmes, vulnerable groups, gender, biodiversity
17	Legal & Regulatory framework	Development/update of laws, by-laws, rulebooks and similar, green procurement, just transition, pursue regional electricity market integration, vulnerable groups, gender, circular economy
18	Monitoring, Reporting, Verification and Transparency	Cut across all areas
19	Capacity building	Human and institutional
20	Transfer and promotion of technologies and know-how	
21	Training, education	All trainings promoting adaptation activities, development of courses, curriculum
22	Public Awareness Communication	Media campaign
23	Research and Innovation	Meteorological and hydrological observation and forecasting, impact and vulnerability assessments, early warning systems
24	Banking and financial services	Credits, loans, insurance
25	Business and other services	Preparing and supporting private investment on a public-private partnership basis
26	Financial and fiscal measures	Incentives, taxes, co-financing, just transition, vulnerable groups

Section V

Method of tagging

5.1 Background

Following the identification of both mitigation and adaptation related climate programmes as well as the budget, which we did by developing typology (section IV), the next step in CBT would be to determine the level of relevance of the climate budget.

One way of tagging would be to tag each of the programmes with their level of relevance using the Rio Marker, which uses three possible scores indicating whether the programme themes are (0) not targeted, (1) a significant objective or (2) a principal objective of the action. The values are attributed according to the extent to which the themes are explicitly addressed at the level of problem analysis (context); objectives and results; and activities. The EU has decided to use 0%, 40%, and 100% of the budget to be climate related respectively for the projects implemented through its support.

Rio Marker helps for an approximate quantification of aid flows that target climate objectives. One of the limitations of the Rio Marker is that it is purpose-based and the emphasis is on the objective pursued in providing support. If the objective does not have a reference to climate change in the formulation of the project, the marker cannot be applied.

The multilateral development banks (MDBs) have used a different method. The tracking of climate finance of MDBs projects needs to fulfill three conditions:

- i) set out the context of vulnerability to CC;
- ii) intent to address the identified vulnerability; and
- iii) ensure that the project activities are directly linked to the vulnerability in question.

In case of tracking climate change mitigation finance, not all activities that reduce GHGs are eligible for MDB mitigation finance, which is based on a list of activities that are compatible with low emissions pathways.

Both Rio Marker and the MDBs approach track climate budget of externally funded projects, whereas a big chunk of domestic funding is also targeted to address climate change which needs to be taken into account while tagging the climate related budget. Therefore, we need to adopt a whole-of-the-government approach to assess and track CC related budget.

5.2 Defining climate relevant programmes/ activities

The first task in CBT is defining climate related programmes. Programmes that are specifically stated in the climate change policy documents or those that have defined climate objectives are easy to identify as climate programmes. But there are several development programmes that have activities that serve both development as well as climate purposes.

Climate mitigation programmes are similar in nature and therefore easy to identify as CC mitigation programmes, however, the adaptation programmes could differ between ministries and within

different geographical regions. Defining climate related programmes particularly for climate adaptation programmes is context specific and which varies based on the need and the level of vulnerability. Therefore, the officials at the budget desk must be able to define which programmes or activities within their respective organization are related to climate change adaptation.

Using the definition of mitigation and adaptation, as used in Rio Markers, development programmes that serve climate purposes have been identified from the list of programmes of 2021 as the starting point to identify the types of programmes being implemented by ministries and grouped them under various typologies².

The development of typology for each ministry helps planners within the respective ministries to agree on the definition of climate related programmes. Some of the typology may be common for several ministries while some will be specific to a ministry or agency. Developing typology allows the ministries to add programmes which aren't listed now but may be implemented in the coming years. The advantage of working with typology is to separate all non-climate programmes from being tagged or, alternatively, have them tagged as non-climate related in the beginning.

Examples of a few typologies for the Ministry of Economy (MoE) and the Ministry of Agriculture, Forestry and Water Economy (MoAFWE) is given in tables 1 and 2 below.

Relevant typology	Key programmes
1. GHG emissions reduction	 GHG emissions reduction from energy and transport sector GHG inventory: AFOLU and waste sector Energy efficiency improvements Installation of sustainable mobility infrastructure CO2 savings from land restoration and avoided land degradation GHG removals by carbon sequestration Green urban areas and green roofs Resilient buildings adapted to climate change Promotion of bicycle and subsidies for electric vehicles and replacing wood burning stoves Gasification
2. Renewable energy production	 Production and use of renewable energy sources Biofuel/fuel usage optimization in agricultural machinery On-farm biodigester and biogas generation
3. Biodiversity protection	 Terrestrial and freshwater biodiversity that are covered by protected areas Restoration of degraded area of ecosystems, including red list species Expansion of protected areas in support of species conservation Increasing forest area, afforestation, sustainable forest management

Table 1: Relevant typology and key programmes of the Ministry of Economy (MoE)

² List of typologies for all climate related ministries and agencies have been presented in a previous report.

4. Tourism	 Early detection of plant diseases Greenery on highways and parks including production of seed and planting material Installation, renovation, and maintenance of infrastructure for development of tourism Rehabilitation of equipment/premises in tourist destinations Development of strategy for tourism development Home tourism support for low-income workers Climate change impacts on transport and tourism
5. Policy, knowledge, extension, R&D support	 Formulation of climate change policies, strategies, and plans for low carbon development Knowledge generation, dissemination, extension services, community groups training Climate change public awareness and education Printing of educational material on energy efficiency and renewable energy sources Monitoring systems for biodiversity, meteorology, and water Plan preparation for management and monitoring of biodiversity, protected area Public call for financing projects in the field of circular economy Research and development of soil carbon storage

Table 2: Relevant typology and key programmes of the Ministry of Agriculture, Forestry and Water Economy (MoAFWE)

Relevant	Key programmes
typology	
 Sustainable water management 	 Flood control and prevention Expanded and improved irrigation infrastructure Rehabilitation and maintenance of irrigation and water storage facilities Watershed restoration/ irrigation management Water resource optimization including adopting integrated water resource management, and non-conventional schemes Improved inputs and effluent management in aquaculture ponds Increased access to water for general population Drought risk management Development of underground wells and monitoring of water
2. Sustainable land management	 Rehabilitation of degraded pasturelands, agroforestry, arboriculture Land-use planning/crop shift in cultivation toward more suitable alternatives Measures to prevent erosion and landslides Use of agro-residues and other methods for soil quality improvement Mapping of erosive areas and areas endangered by erosion
 Food security and the promotion of agro- biodiversity 	 Sustainable agriculture production Preservation of crop genetic diversity, including seed development Seed banks and seed quality control/certification Pest and disease outbreaks control Promotion of biological agents and pesticides Dissemination of drought and flood resistant seeds Soil management Training on organic farming and promotion of bio-organic fertilizers and inputs

	Veterinary health and improved eattle feedeteck
	 Veterinary health and improved cattle feedstock
	 Improved access of climate vulnerable groups to inputs and credit
	 Multilateral/bilateral fisheries management arrangements
4. Biodiversity	 Terrestrial and freshwater biodiversity that are covered by protected areas
	 Restoration of degraded area of ecosystems, including red list species
	 Expansion of protected areas in support of species conservation
	 Increasing forest area, afforestation, sustainable forest management
	 Early detection of plant diseases
	- Greenery on highways and parks including production of seed and planting material
5. Policy,	- Formulation of climate change policies, strategies and plans for low carbon development
knowledge,	 Knowledge generation, dissemination, extension services, community groups training
extension,	 Climate change public awareness and education
R&D support	 Printing of educational material on energy efficiency and renewable energy sources
	 Monitoring systems for biodiversity, meteorology, and water
	– Plan preparation for management and monitoring of biodiversity, protected area
	 Public call for financing projects in the field of circular economy
	 Research and development of soil carbon storage
	- Research and development of son carbon stolage

5.3 Defining climate objectives of the programmes/ activities

Once the typology is defined, the programmes under each of the typology are listed. The climate function of these programmes, such as mitigation or adaption they contribute to, are also noted. Some programmes are likely to have both mitigation and adaptation functions, which will be noted accordingly. Examples are shown in Tables 3 and 4 for the two ministries.

5.4 Approaches of weighting relevance

The next step in the CBT would be to see the extent to which the programmes are relevant to climate change. When the entire budget of the programme is climate related, it is fairly easy to provide the weight. For example, for the projects such as promotion of electric vehicles, identified as having a clear objective of climate change, the entire budget can be considered climate relevant. Whereas, there are many programmes which by nature are climate related but only a fraction of the budget of those programmes address climate issues. Capturing those portions of the budget is crucial while tracking climate expenditure. Therefore, identifying the level of relevance by climate expenditure is important.

Two technical approaches to weighting the relevance of the climate budget have been used by countries—the objectives-based approach and the benefits-based approach. The objectives-based approach is simpler, while the benefit-based approach is complex.

In the objectives-based approach, weighting is determined by an assessment of the relevance of a programme's stated objectives or its main contribution. It is based on the CPEIR climate relevance index where the objective of the programme is mapped using expert judgement. The level of relevance is identified as highly relevant to moderately relevant or marginal relevance indicating the proportion of the expenditure to be marked as climate relevant. The method is fairly straight forward and can be

introduced across ministries with short trainings for the officials doing the tagging. The approach has its limitations as it uses a range of expenditures to categorize the level of relevance.

The benefits-based approach involves applying a benefit cost ratio, where the weight of relevance is determined by analysing the climate benefits of the proposed programme. The method helps to identify the additional CC component of a programme compared to the expert judgement as used in the CPEIR index method. The benefits include: economic benefits (e.g. incomes, assets), social benefits (e.g. education, health, welfare, gender) and environmental benefits (e.g. biodiversity, reduced pollution). The approach requires adequate data regarding the benefits which are often not available for analysis for many programmes.

To overcome these limitations, countries have adopted hybrid approaches to facilitate weighting of climate relevance and tracking of climate budget in the national budget. The hybrid method uses a combination of approaches in which the method is based on objective-based approach while also attempting to capture the additional CC component

5.5 Proposed method of weighting relevance

In the following section both approaches of weighting have been presented as examples. One of the approaches will be considered for weighting relevance level.

Option 1: Tagging at programme level using objective based approach

An important consideration in tagging is that most tagging practices have identified the expenditure at the programme level, which gives a fairly good estimate of climate expenditure. Programmes with a clear focus on climate change will be classified as **highly relevant** and weighted at 100 percent; programmes that have links to climate change objectives will be considered of **medium relevance** and weighted at 50 percent (which can be split between adaptation and mitigation at 25 percent each); and programmes that are related to the medium relevant expenditures but not directly linked to climate change will be considered **low relevance** items and weighted at 20 percent (which may be split 10 percent each between adaptation and mitigation).

The following tables 3 and 4 show examples of how the method works. Under each of the typology, there are several climate-related programmes (as indicated in Table 1 and 2 above). Only some sample programmes have been used here to indicate how the method works.

Typology	Climate related programmes	Μ	A	В	Climat e focus	Relev ance
GHG emiss	sions reduction					
	GHG emissions reduction from energy and transport sector	x			Clear focus on CC	100
	GHG removals by carbon sequestration	x			With links to CC	50
Renewable	e energy production					
	Production and use of renewable energy sources	x			Clear focus on CC	100
Biodiversit	У					
	Terrestrial and freshwater biodiversity that are covered by protected areas	x			Indirect links to CC	20

Table 3: Assigning weights to key programme (MoE)

M = mitigation; A = adaptation; B = both (mitigation and adaptation)

Table 4: Assigning weights to key programme (MoAFWE)

Typology	Climate interventions	Μ	A	В	Climate focus	Rel eva nce
Sustainable	e water management					
	Flood control and prevention		x		With links to CC	50
	Water resource optimization including adopting integrated water resource management, and non-conventional schemes		x		With links to CC	50
Food secur	rity and the promotion of agro-biodiversity				·	
	Sustainable agriculture production				Indirect links to CC	20
Policy, Kno	wledge, Extension, research and developm	ent s	upp	ort		
	Formulation of climate change policies, strategies and plans for low carbon				Clear focus	50
	development				on CC	50

M = mitigation; A = adaptation; B = both (mitigation and adaptation)

The climate budget is calculated using the relevance level as shown above. Table 5 shows indicative climate budget for the sample programmes of two ministries.

Ministry	Programme	Annual budget (for example)	Climate weight (%)	CC relevant budget
Ministry of Economy	GHG emissions reduction from energy and transport sector	40,000	100	40,000
	GHG removals by carbon sequestration	60,000	50	30,000
	Production and use of renewable energy sources	80,000	100	80,000
	Terrestrial and freshwater biodiversity that are covered by protected areas	25,000	20	5,000
	Total	205,000		155,000
	Percent of minis	terial budget	<u>.</u>	75%
Ministry of	Flood control and prevention	100,000	50	50,000
Agriculture, Forestry and Water Economy	Water resource optimization including adopting integrated water resource management, and non-conventional schemes	50,000	50	25,000
	Sustainable agriculture production	60,000	20	12,000
	Formulation of climate change policies, strategies and plans for low carbon development	30,000	50	15,000
	Total	240,000		102,000
	Percent of minis	terial budget		42%

Table 5: Calculating climate relevant budget

Option 2: Tagging at the activity level using a combination method

Since some of the programmes may also have a good portion of non-climate related budget, tagging at programme level only gives a range of the climate budget. It is desirable to tag at the activity level to improve the accuracy of the budget. For this, activities that are contributing to climate objectives under each programme will be listed as climate interventions. Examples are shown in Tables 6 and 7 for few activities.

In this option, relevance level is calculated as the percentage of total expenditure for each climate intervention minus the share of the expenditure that would take place under a business-as-usual (BAU) scenario. It needs to be emphasized that some of the programmes already have climate functions built in them, and will contribute even if they are implemented as development programmes under a business as usual (BAU) scenario. When these programmes are designed and implemented to contribute to climate functions, there is an element of additional benefit they would provide which needs to take into account.

The baseline under a business as usual (BAU) scenario and the expected contribution or the added relevance weight in the climate change context is established for each of the activity using expert

judgment. Then the standard deviation³ of the relevance weights is determined which is then subtracted from the maximum relevance weight. This will improve the accuracy of the assessed climate budget and subsequently its relevance level.

The following examples will elaborate on how it would work. The activity of promoting electric vehicles adds 100% to the climate objective, whereas reforestation, which is climate related, is actually growing trees in areas where there were forests before. Therefore, it is assumed that it was already contributing about 40% of sequestration under BAU and the new activity would increase it to 80% once grown. Therefore, the additional relevance is only 40%. In other words, only 40% of the reforestation expenditure would be considered climate relevant while in case of electric vehicles 100% of the expenditure would be considered climate relevant.

Since all activities under GHG emissions reduction programme are contributing 100%, the climate relevance weight of the programme would be 100, while the climate relevance weight of carbon sequestration programme would be 64% (Table 6).

The contribution at BAU has to be judged by the desk official who is proposing the budget as they would know exactly where the activity is going to be implemented. The additional dimension needs to be found out in consultations with experts or by using expert judgement.

Typology	Climate related programmes	Μ	A	В	Climate interventions	Sensitivity in BAU	Additional Dimension	Releva nce									
GHG emis	sions reduction																
	GHG emissions				Electric vehicles	0	100	100									
	reduction from energy and	х			Improving efficiency	0	100	100									
	transport sector				Decommissioning of coal plants	0	100	100									
	Clim	ate re	eleva	nce	weight (Max interve	ention weight)	100									
	GHG removals by	,			Afforestation	0	100	100									
	, carbon	carbon	Re						Reforestation	40	80	40					
	sequestration		x	x	ı x						ĸ		x		Improved practices	50	70
					Enrich plantation	50	80	30									
	Clim	ate r	eleva	nce	weight (Max interve	ention weight)	64									
Renewab	le energy production																
	Production and use				Activity 1	0	100	100									
	of renewable energy sources	x			Activity 2	0	100	100									
	Clim	ate re	eleva	nce	weight (Max interve	ention weight)	100									
Biodiversi	ty																
	Terrestrial and				Activity 1	50	80	30									
	freshwater	х			Activity 2	20	50	30									
	biodiversity that are				Activity 3	40	100	60									

Table 6: Assigning weights to the activities under each key programme (MoE)

³ Method of calculating standard deviation is given in annex.

covered by protected areas				
Clin	iate relevance	weight (Max interve	ntion weight)	42

Table 7: Assigning weights to the activities under each key programme (MoAFWE)

Гуроlоду	Climate interventions	Μ	А	В	Climate interventions	Sensitivity in BAU	Add. Dimens ion	Relevan ce										
Sustainat	ole water management																	
	Flood control and				Embankments	0	100	100										
	prevention		x		Awareness raising	60	80	20										
					Early warning system	0	100	100										
					Watershed mgt	40	60	20										
	Climate	e rele	evanc	e we	eight (Max interver	ntion weight)		53										
	Water resource optimization including adopting		Improved irrigation management	40	80	40												
	integrated water resource management, and		x	x	x	x	x	x	x	x	x	x	(x	Establish non- conventional systems	0	100	100
	non-conventional schemes				Training water users	30	60	30										
					Strengthen local capacity for IWRM	30	80	50										
	Climate	e rele	evanc	e we	eight (Max interver	ntion weight)		69										
Food sec	urity and the promotion	of a	gro-b	iodiv	versity													
	Sustainable agriculture				Application of IPM	40	60	20										
	production				Adopting agroforestry	40	80	40										
					Managing whole system and landscape	0	75	75										
	Climate	e rele	evanc	e we	eight (Max interver	ntion weight)		47										
Policy, Kr	nowledge, Extension, res	searc	h anc	l dev	velopment support													
	Formulation of climate change policies, strategies				Formulation of drafting committee and draft preparation	0	75	75										

and plans for low carbon development		Stakeholder consultation and finalization	0	100	100
Climate	relevance we	eight (Max interver	ntion weight)		82

6. Calculating climate relevant budget

The portion of the climate budget for each programme is calculated using the weighting relevance as calculated above. An example with arbitrary budget figures is given below (Table 8).

Table 8: Calculating climate relevant budget

Ministry	Programme	Annual budget (for example)	Climate weight (%)	CC relevant budget
Ministry of Economy	GHG emissions reduction from energy and transport sector	40,000	100	40,000
	GHG removals by carbon sequestration	60,000	64	38,400
	Production and use of renewable energy sources	80,000	100	80,000
	Terrestrial and freshwater biodiversity that are covered by protected areas	25,000	42	10,500
	Total	205,000		168,900
Ministry of	Flood control and prevention	100,000	53	61,000
Agriculture, Forestry and Water Economy	Water resource optimization including adopting integrated water resource management, and Non-conventional schemes	50,000	69	34,500
	Sustainable agriculture production	60,000	47	34,200
	Formulation of climate change policies, strategies and plans for low carbon development	30,000	82	30,000
	Total	240,000		149,300

Note: the climate budget calculated using the two approaches above have resulted in different figures. The latter being slightly higher than the one with the objectives-based approach. The selection of the method depends on how best it can be implemented. It is recommended that we use the objectives-based approach to introduce the method and as we gain experience we can use tagging at activity level to improve accuracy.

7. Climate budget category

Rio Marker categorizes the climate budget into three categories: principle, significant, and marginal. The French model of green budget uses five categories depending upon its contribution to climate functions.

Some countries use three levels from highly relevant to relevant to marginal. It is proposed that RNM uses four categories from high relevance to marginal relevance with two more categories in between (medium relevance and low relevance) based on the range of climate budget of the climate relevant programmes (Table 9).

Table 9: Climate relevant index

Level	Weights	Remarks
High relevance	> 75%	Clear primary objectives of contributing mitigation or adaptation
Medium relevance	50-74%	Programmes that have some activities that contribute to mitigation or adaptation
Low relevance	25-49%	Indirect contribution to climate objectives
Marginal relevance	< 25%	Marginal contribution only

8. Linking SDGs

Achieving Agenda 2030 through the SDGs is a priority for the government of RNM. The SDGs have been addressed by the national programmes in one way or the other because key sectors that support the SDGs including health, poverty, education, environment, and economic development and cross cutting areas such as gender and governance are addressed by the national policy, planning, and budgeting. Therefore, it is particularly important to ensure that the budgetary frameworks also reflect the commitments to the 2030 Agenda and its related SDGs in a more coherent way. For this, the SDGs must be integrated with the national budget systems too.

Once the climate relevant programmes have been identified and their focus stated (tables 10 and 11 below), its linkages to the SDGs can be indicated too. It will provide some basis to see how the SDGs have been supported by the climate related budget. When one climate related programme supports mainly one goal, it is easy to also link the budget related to that goal. Moreover, when one programme supports more than one SDGs, which is likely in case of adaptation related programmes, and SDGs being more comprehensive with measurable dimensions, its integration will demand additional work compared to CBT. Climate relevant programmes as such are limited in number compared to many other non-climate relevant programmes in the budgetary framework that support SDGs. However, the CBT process may be a head start in developing a robust way of integrating SDGs in the budget. The CBT provides an opportunity to see how each of the climate relevant programmes and the budget allocated to them are linked to particular SDGs.

The following example have been presented (for discussion) as an attempt to link SDGs with climate relevant programmes.

Typology	Climate related programmes	Μ	А	В	Climate focus	Relevance	SDG marking
GHG emissi	ons reduction						
	GHG emissions reduction from energy and transport sector	x			Clear focus on CC	100	13
	GHG removals by carbon sequestration	x			With links to CC	50	13
Renewable	energy production						
	Production and use of renewable energy sources	x			Clear focus on CC	100	7, 13
Biodiversity	-						
	Terrestrial and freshwater biodiversity that are covered by protected areas	x			Indirect links to CC	20	6, 15

Table 10: SDGs marking of CC relevant programmes of the MOE

Table 11: SDGs marking of CC relevant programmes of the MOAFWE

Typolog y	Climate interventions	Μ	А	В	Climate focus	Relevance	SDGs marking
Sustainable	e water management						
	Flood control and prevention		x		With links to CC	50	2, 11, 13
	Water resource optimization including adopting integrated water resource management, and Non-conventional schemes		x		With links to CC	50	6, 11
Food secur	ity and the promotion of agro-biodi	versi	ity				
	Sustainable agriculture production				Indirect links to CC	20	1, 2
Policy, Kno	wledge, Extension, research and de	velo	omen	it su	pport		
	Formulation of climate change policies, strategies and plans for				Clear focus on	50	13
	low carbon development				CC	50	Several

9. Conclusions and recommendations

The following conclusions have been drawn based on the initiatives already taken by the government, the existing institutional capacity and the need to fulfil the requirements of successfully developing and implementing CBT in the Republic of North Macedonia. Key recommendations have been made for further actions.

- a. As climate action is cross-sectoral, responsibilities need to be shared and effectively coordinated between ministries. The success of climate responses depends considerably on inter-sectoral coordination and cooperation, which can be achieved by integrating climate change in all aspects of public finance, led by the Ministry of Finance and coordinated by MoEPP, as the latter is a lead institution mandated by law to organize and drive necessary climate actions.
 - The climate change policy, which is under preparation, should include CBT as a policy to integrate climate change in overall planning and budgeting processes.
- b. The fact that the NCCC is being revised within the Law on Climate Action to act as an advisory body provides an excellent opportunity to begin introducing climate budget tracking; the committee will 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 and plans.
 - Provision for CBT should be included in the new Law on Climate Action Act to make it mandatory for all climate related sectors to use CBT for (MRV) monitor, report, and verify climate change related expenditure.
- c. Since climate change is a long-term issue, each line ministry has to mainstream climate change in their sectoral policy and reflect in the national budget. It will require a more concerted approach within sectors to address it in a coordinated way; the government should consider bringing climate change identities for administrative units within Ministries that deal with climate change issues.
 - It is recommended to formulate task-force of officials responsible for planning and budgeting in line ministries to identify activities within their ministries that are climate-related. This will help to consider sectoral nuances of climate activities while developing tagging method.
 - Instead of recruiting separate staff to implement CBT in the budget system, it is recommended to train existing budget and planning officials in CBT implementation in each of the identified ministries and agencies including municipalities. This will help strengthen the system in the long run.

- d. The key area that needs our attention in improving the effectiveness of climate response and institutionalizing a reporting system is mainstreaming climate change in the national and sub-national planning and budgeting processes, which require enhancing the capacities of existing planning and budget staff to manage climate change issues.
 - Encourage the municipalities to include CBT in their planning. One way to do it is for municipalities to realign their strategic plans to the Law on Climate Action once the Law includes CBT as mandatory for budget users.
- e. The tagging system for climate mitigation expenditures should be developed based on the existing public financial management and accounting system in order to facilitate building a system for regular and periodic data collection required for decision-making on climate issues and responses. This applies to practically all relevant ministries that have climate related work streams in their portfolio.
 - For this, the budget management information system, (BMIS) in particular, should make provisions for introducing CBT for climate-related programmes and activities. The IT personnel responsible for managing the BMIS should be provided with a short orientation on what changes or modifications are required in the BMIS so that the budget users can tag climate activities accordingly.
 - It is also recommended that MoF staff who coordinate the budget planning as well as those involved in managing the financial management information system (FMIS) that produce expenditure reports should be trained in CBT for the implementation of the CBT system to generate information on climate budget allocation and expenditure reporting as per the design of the system.
- f. Two options have been proposed for weighting the level of relevance of climate budget. Because of the complexities involved in the option 2 (combination system) it is suggested to begin implementing CBT using option 1 method which uses objective based approach tagging.
 - Begin introducing CBT with option 1 in 2021 at by tagging budget at MoF.
 - Provide training to enhance capacity of the sectoral staff in October 2021 to tag climate budget at ministry level.
 - Upscale the tagging method using option 2 in the year 3 when staff are familiar and accustomed with tagging climate budget using option 1.

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Annex

Calculating standard deviation

In statistics, the standard deviation is a measure of the amount of variation or dispersion of a set of values. Lower the standard deviation closer is the values to the mean of the set. While dealing with relevance level that have large variations, one could take the average value, however the outliers in the set of values with large variations may affect the result substantially. It is not appropriate to drop the outlier because all targeted funds big or small support climate objectives.

Standard deviation helps us assess the spread of the values from the mean and when subtracted from the higher value, helps us reduce the influence of small value and capture the inclination of the spread realistically.

The formula used to calculate "Population Standard Deviation":

$$\sigma = \sqrt{\frac{1}{N} \sum_{i=1}^{N} (x_i - \mu)^2}$$

Where,

- σ (sigma) = population standard deviation
- N = number of data points
- X_i = value of ith point in the data set
- μ = mean value of data set