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ARMENIA: BACKGROUND ANALYSIS AND METHODOLOGY FOR CCBII, CPEIR AND CBT

THE CLIENT: UNITED NATIONS DEVELOPMENT PROGRAMME (UNDP)

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The purpose of the present methodological review is to provide the background, describe the objectives, and provides details on the CCBII, CPEIR and CBT process and methodology for Armenia.

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ABBREVIATIONS

AMD	Armenian Dram
CBII	Climate Change Budget Integration Index
CBT	Climate Change Budget Tagging
CC	Climate Change
CPE	Climate Change-related public expenditure
CPEIR	Climate Public Expenditure and institutional Review
CSO	Civil Society Organisation
DP	Development Partner
FMIS	Financial Management Information System
GDP	Gross Domestic Product
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH
GNG	Greenhouse Gas
GoA	Government of the Republic of Armenia
INDC	Intended Nationally Determined Contributions
MoEc	Ministry of Economy of the Republic of Armenia
MoEn	Ministry of Environment of the Republic of Armenia
MoES	Ministry of Emergency Situations of the Republic of Armenia
MoESCS	Ministry of Education, Science, Culture and Sport of the Republic of Armenia
MoF	Ministry of Finance of the Republic of Armenia
MoH	Ministry of Health of the Republic of Armenia
MoTAI	Ministry of Territorial Administration and Infrastructures
MTEF	Medium-Term Expenditure Framework
NGO	Non-governmental Organization
PA	Paris Agreement
PB	Program-based Budgeting
PFM	Public Finance Management
SC	Statistical Committee
SDG	Sustainable Development Goal
SFDRR	Sendai Framework for Disaster Risk Reduction
SP	Strategic Plan
UN	The United Nations
UNCCD	United Nations Convention to Combat Desertification
UNDP	The United Nations Development Program
UNFCCC	The United Nations Framework Convention on Climate Change
USD	United States Dollar
WB	The World Bank
YM	Yerevan Municipality

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PREFACE

This document presents the methodology for Climate Change Budget Integration Index (CCBII) and Climate Change Budget Tagging (CBT) developed by Vahan Sirunyan and John Ward. This has been developed under the consulting services assignment "Climate Change Budget Tagging" being implemented by Vahan Sirunyan for the United Nations Development Programme (UNDP) (the "Client") (Contract No. UNDP/ARM/IC/2020/122 between UNDP and Vahan Sirunyan dated May 11, 2020) and under the consulting services assignment "International Consultant on Climate Change Public Expenditure Framework Development in Armenia" and the Client (Contract No. UNDP/IRH/IC/2020/088, dated June 12, 2020).

The document provides the background of the initiative, briefly describes the objectives of the assignment and provides details for the CCBII, CPEIR and CBT process and methodology, including:

- The rationale stemming from international and national policy frameworks;
- Overview of the Armenian economy and the budgetary system;
- Objectives and the scope of the assignment;
- CCBII assessment and calculation methodology;
- CPEIR process and methodology;
    - Classification of state budget expenditures;
    - Definition and classification of climate change-related public expenditure;
    - Assessment of climate change public expenditure;
    - Limitations and challenges;
- Development of CBT model for Armenia.

It should be noted that the methodology and approach discussed in this document may be further adjusted and modified in the course of the practical application of the methodology. The finalized methodology with corresponding recommendations will be submitted with the CPEIR Final Report and CBT model for Armenia at the end of the assignment.

1. BACKGROUND

1.1. Climate Risks in Armenia

Armenia is a mountainous landlocked country, located on the border of the Caucasus and Central Asia on the Armenian Highland. Armenia's climate is influenced by the Caucasus Mountains, and ranges from dry subtropical to cold alpine. The average annual temperature (1960-2015) is 7.6°C, varying from -8°C in the high mountains to 12 to 14°C in low valleys. The coldest temperatures occur December to February (ranging from -3 to -7°C), and warmest temperatures occur in July and August (averaging about 20°C); though, in low-land areas temperatures can reach 24 to 26°C in July and August, and in high alpine regions temperatures typically do not exceed 10°C.

Armenia's average annual precipitation is 598 mm, over 40 percent occurring April through June; with average annual precipitation of 200 to 250 mm in low-land areas, and 800 to 1,000 mm at higher altitudes. The average annual wind velocity in the territory of Armenia is unevenly distributed: from 1.0 m/sec in low-land areas up to 8.0 m/sec in high mountains. In summer, the velocity of the mountainous winds can reach 20.0 m/sec or more.[1]

In recent decades, there has been a significant increase in temperature growth rates in Armenia relative to the annual mean for 1961-1990 (5.50C), whereby in 1929-2016 the average annual temperature increased by 1.23^0C. The decreasing trends of precipitation are maintained. Precipitation during the period of 1935-2016 decreased by almost 9%.

The territory of Armenia is characterized by high frequency and magnitude of hazardous hydrometeorological phenomena, which trigger the occurrence of emergencies and inflict significant losses on the population and the economy. It has a history of drought, significant land degradation, and active desertification processes. Frequent landslides, mudflows, floods, and other natural hazards negatively impact infrastructure, agriculture, and water resources, increasing the country's vulnerability to climate variability and change.

Table 1. Major Climate Stressors and Climate Risk in Armenia by Sectors/Areas

Sector/Area	Climate Stressors	Climate Risks
Infrastructure	• Rising temperatures • Increased storminess	• Increased flood and mudslide damage to homes, buildings, communication networks, and other infrastructure. • Increased damage to transportation routes, including roads, highways, and railways.
Agriculture	• Rising temperatures • Changes in seasonality of precipitation • Increased drought • Increased storminess	• Increased pests and disease • Soil erosion and loss of soil fertility • Reduced crop yields (alfalfa, apricot, grape, potato) • Increased need for irrigation to maintain yields • Damage to crops and livestock
Human health	• Rising temperatures • Reduced rainfall and increased drought • Increased storms	• Increased incidence of heatstroke, particularly among the elderly and chronically ill • Increased incidence of malaria • Increased risk of injury/death from mudflows and landslides
Ecosystems	• Rising temperatures • Reduced rainfall	• Changes in species' abundance and distribution • Reduced tree growth and reproduction • Forest degradation from increased pests/disease • Increased intensity and frequency of forest fires

[1] Armenia: 4th National Communication on Climate Change (2020)

Sector/Area	Climate Stressors	Climate Risks
Water resources	• Rising temperatures • Reduced summer rainfall • Increased drought • Increased storms	• Reduced snow cover and surface water from snowmelt • Increased water stress for households, agriculture and hydropower production • Decreased runoff with declines in rainfall, reducing freshwater supply from both surface and groundwater sources • Reduced water quality • Increased flooding

1.2. The Rationale Stemming from International Framework

A government's budget is a reflection of its priorities, and therefore how much is spent on climate change adaptation and mitigation activities is testimony to the government's commitment to green and sustainable development. The fulfillment of climate change-related national goals depends on adequate resources being devoted to relevant legislation and policies, and to the institutions that work to implement them. As resources are scarce, a government must make a political decision and the necessary trade-offs to prioritize investments in climate change and mobilize resources for this purpose, including development assistance.

Armenia ratified the **United Nations Framework Convention on Climate Change (UNFCCC)** in 1993, the Kyoto Protocol in 2002, and the Paris Agreement and Doha Amendment to the Kyoto Protocol in 2017. **The Paris Agreement (PA)** on climate change is a binding global agreement, which formulates a plan for avoiding the impact of the dangerous changes in climate by limiting global warming at a significantly lower level than 2°C. The agreement also aims to strengthen the ability of countries to deal with the impacts of climate change, through appropriate financial flows, a new technology framework, and an enhanced capacity-building framework.

The obligations of Armenia within the framework of those international multilateral agreements derive from the status of a developing country acting as a non-Annex I party to the UNFCCC. The countries position under the UNFCCC and the PA is set out in the "Intended Nationally Determined Contributions" document, approved by the GoA Protocol Decree No. 41, dated September 10, 2015(INDC). The INDC covers the period 2015-2030 and reflects the aspirations of the country for the reduction of greenhouse gas emissions (GHG), taking into account the local conditions and capabilities of the country.

Particularly, in its INDC the Armenia stated its readiness to take voluntary obligations to limit its GHG emissions should adequate financial and technological support be available. The document builds on the principle of "green economy" and an ecosystem-based approach towards mitigation and adaptation actions. According to the document, the country's total emissions for the period between 2015 and 2030 should not exceed the equivalent of 633 million tons of carbon dioxide (tons of $CO_{2\,eq.}$).

Box 1. Climate change mitigation and adaptation priority sectors and areas defined in INDC

Priority sectors and areas (Mitigation)	Priority sectors and areas (Adaptation)
Energy (including renewable energy and energy efficiency)	Natural ecosystems (aquatic and terrestrial, including forest ecosystems, biodiversity and land cover)
Transport (including development of electrical transport)	Human health
Urban development (including buildings and construction)	Water resource management
Industrial processes (construction materials and chemical production)	Agriculture, including fishery and forests
Waste management (solid waste, wastewater, agricultural waste)	Energy
Land use and Forestry (afforestation, forest protection, carbon storage in soil)	Human settlements, infrastructures and Tourism

In 1997 Armenia ratified the **United Nations Convention to Combat Desertification (UNCCD)**, which is the sole legally binding international agreement linking environment and development to sustainable land management. The Convention addresses specifically the arid, semi-arid and dry sub-humid areas, known as the drylands, where some of the most vulnerable ecosystems and peoples can be found.

The provisions of the UNCCD reflect a strong link between desertification, land degradation and drought and adaptation to climate change. Article 10 provides for the formulation of national action programs, which address poverty reduction and vulnerability to climate change in affected developing countries. These action programs seek to identify the factors contributing to desertification and practical measures necessary to combat desertification and mitigate the effects of drought, thereby contributing fully to adaptation efforts.

In 2015, the National Strategy for Combating Desertification and the National Action Plan was ratified by the GoA, which emphasizes the importance of legislative improvements related to desertification issues, increasing the effectiveness of land management, raising public awareness on desertification issues and their solutions, as well as international cooperation.

In 2015, Armenia joined the **Sendai Framework for Disaster Risk Reduction 2015-2030 (SFDRR)**. SFDRR is a voluntary agreement, which defines a global goal to prevent new and reduce existing disaster risks through the implementation of integrated and inclusive economic, structural, legal, social, health, cultural, educational, environmental, technological, political and institutional measures that prevent and reduce hazard exposure and vulnerability to disaster, increase preparedness for response and recovery, and thus strengthen resilience.

A very important aspect of the SFDRR is the shift from a focus on disaster management to a focus on disaster risk management, which links SFDRR with Climate change adaptation goals. SFDRR includes seven global targets and four priorities for action, covering improving the knowledge base, strengthening the governance of and increasing the investment in risk reduction measures, to enhancing preparedness and response. Most priorities recognize climate change as an important driver for disasters and address the issue at various levels (i.e. better information, more and better methods and tools). Links to climate change adaptation are set at the level of implementation (Art.47(d)), recognizing the need to incorporate DRR into climate change adaptation policies[2].

[2] "Bonding climate change adaptation and disaster risk reduction" (PLACARD 2020)

The **Sustainable Development Agenda 2030** adopted in 2015, encompasses 17 SDGs, 169 targets covering different areas that together are to promote economic growth and development, such as education, health, social protection, environment protection, and climate change. Under each goal, specific targets are identified as prerequisites to achieving that goal.

The SDG 13 "Climate action" is specifically linked with climate change mitigation and adaptation activities to " Take urgent action to combat climate change and its impacts". This SDG has 5 targets with 8 indicators, which specify the goals and represent the metrics by which the achievement of these targets will be tracked. Meanwhile, it is estimated that 12 out of 17 SDGs involve taking actions on climate change in addition to climate change having its own goal[3]. Among those goals are the SDG 7 "Affordable and clean energy", SDG 6 "Clean water and sanitation", SDG 11 "Sustainable cities and communities", SDG and 15 "Life on land".

Box 2. Agenda 30: Goal and Targets for SDG 13 "Climate Action"

Goal 13: Take urgent action to combat climate change and its impacts

- **13.1** Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries
- **13.2** Integrate climate change measures into national policies, strategies and planning
- **13.3** Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning
- **13.A** Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly $100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible
- **13.B** Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities

Although SGDs are not enforced by law, they form the global development framework, and countries are supposed to set up national frameworks for achieving them. Countries need to be able to review the progress towards reaching the goals, which will require collecting timely data and making it accessible. However, in many countries, insufficient data makes it difficult to assess the SDG progress for climate change.

Better quality data is one of the areas for strengthened global cooperation and partnership under the SDGs. Reaching SDG targets by 2030 is not possible without strong regional and international cooperation and partnership to coordinate the efforts of governments, civil society, the private sector, the development partners, and other actors and help to mobilize all available resources. Assistance to developing countries is vital to ensure that progress towards SDGs is equal and sustainable. This includes financial assistance, access to science, technology and innovation, capacity building, public-private partnership, and monitoring and evaluation.

The principles outlined in the PA and SDG targets are directly linked with and affected by the management of public funds. To reveal issues and challenges with climate change that the country face and ensure the

[3] "Connections between the Paris Agreement and the 2030 Agenda. The case for policy coherence." Stockholm Environment Institute (Sep. 2019)

realization of mitigation and adaptation actions sufficient funds should be allocated. Moreover, these funds should be managed "fairly and wisely" to maintain Value for Money for all.

1.3. The Rationale Stemming from the National Policy Framework

The 2019-2023 Program of the Government of Armenia. The program makes a clear emphasis on the development of the renewable energy and energy-efficient systems, for mitigation and prevention of problems resulting from the climate change, as well as the implementation of adaptation actions under the commitments taken through the international agreements, the development and implementation of a sustainable policy for promoting green economy and achieving long-term sustainable development goals.

Box 3. Main climate change-related strategic goals defined by the GoA Program 2019-2023 (excerpt)

Sector	Objective
Environment	To minimize the negative impacts on the environment, air, climate, water, soil, flora, and fauna, rule out the overly and illegal exploitation of natural resources, and to ensure the implementation of preventive measures.
Energy	To ensure the country's energy independence and enhancing security, ensuring the regional integration process, sustainable development of the energy sphere based on the full and effective utilization of the primary (renewable) local energy resources, further development of atomic energy, diversification of the supply of the energy carriers and introduction of energy-efficient and new technologies.
Agriculture	To increase the effectiveness of agriculture, to increase the food safety level …. The irrigation water in Armenia must be as available and common as electricity supply is. The introduction of drip irrigation and rainwater harvesting systems will provide the opportunity to essentially save water resources, and the state support program for establishing intensive orchards cultivated through modern technologies will provide the opportunity to save land resources. The Government will take measures for the large-scale introduction of a more effective anti-hail system based on new technologies.

A new Transformation Strategy of Armenia for the period 2020-2050 is currently under development, which is expected to become the high-level strategic document in Armenia. **The DRAFT Transformation Strategy of Armenia (2020-2050)** defines 16 mega-goals, linking them with SDGs. Some of those mega- goals are directly linked with climate change mitigation and adaptation.

Box 4. Climate change-related goals in the DRAFT Transformation Strategy of Armenia (2020-2050)[4]

"Clean and Green Armenia" - addresses the widespread responsible and caring attitude of the public to the environment, effective prevention of the ecological and climate risks (SDG 7, SDG 13, SDG 15);

"Productive and Responsible Farming" - assumes sustainably developing, innovative, added value multiplying, caring for natural resources farming, which ensures food security and sufficiency (SDG 2, SDG 6, SDG 11, SDG 12);

"Renewable and Available Energy" - presumes to provide Armenia with energy security and self-sufficiency, sustainable availability and accessibility of environmentally harmless electric power (SDG 7, SDG 13, SDG 15).

[4] Draft "Voluntary National Review (VNR) of Sustainable Development Goals: Armenia 2020", (https://www.gov.am/u_files/file/VNR-DRAFT-.pdf)

Except for the INDC, there is virtually no unified and comprehensive document on climate change mitigation and adaptation policy/strategy at the national level in Armenia. Due to the cross-cutting nature of climate change adaptation and mitigation goals, these goals and relevant actions are mainly embedded in sectoral strategies and legislation. The following are the main (not exhaustive) sectoral policy/strategic documents that include climate change-related goals and actions.

The Energy Sector Development Strategy within the Context of Economic Development (2005). The concept identifies that the strategic directions of the energy sector development, which includes the use of renewable energy resources and energy efficiency, as well as the nuclear power, for ensuring the necessary level of energy security and independence. The document also defines the actions for ensuring the achievement of the goals and initiatives of the strategy.

The National Programme on Energy Saving and Renewable Energy (2007). The program targets the period of 2007-2020 for the assessment and realization forecasts of the energy-savings and renewable energy potential of Armenia.

The Energy Security Concept (2013). The concept seeks to identify the main ways for the achievement of the defined level of energy security by compensating for the lack of local industrial fossil fuel reserves, providing an uninterrupted power supply with economically appropriate prices and acceptable quality. One of the objectives of the concept is to provide an environmentally sustainable power supply based on sustainable development principles and the international environ-mental commitments of Armenia. The concept states that promoting renewable energy, increasing energy efficiency, saving energy, and developing the nuclear energy sector are key components of energy security.

The Directions of Long-term Development of the Energy Sector by 2036 (2015). The directions are targeted at ensuring the sustainable development of the energy sector based on the development of nuclear energy, effective use of renewable resources, construction of combined cycle thermos-power plants, and diversification of the fuel importation ways.

The Concept of Hydroenergy Development (2016). The concept prescribes the vision for the development of the sphere of hydro-energy, making the investment environment more attractive, the need for implementing options of public-private sector cooperation, and providing certain legal guarantees.

The Strategy of the Main Directions Ensuring Economic Development in Agricultural Sector for 2020-2030 (2019). The vision of the Strategy for the next ten years is to have sustainable, innovative, high value-added agriculture in harmony with the environment, ensuring the care of natural resources, producing organic products, and creating conditions for the well-being of the people living in the village. The strategy is based on the principle of climate change adaptation, resistance and environmental sustainability, which aims to increase focus on climate change awareness, adaptation, and mitigation strategies (e.g., improve agriculture sector climate change monitoring, promote climate-smart agriculture practices, and support dissemination of climate adaptation inputs like drought-resistant seeds), while also working to ensure that agriculture sector development is informed by a focus on resource sustainability including, most critically, good water and soil management practices. The range of the main objectives of the policy includes the development of insurance market in agriculture, development, and implementation of hail risk mitigation program, identification and promotion of broader climate adaptation and resistance measures (e.g., drought-resistant seeds, new agricultural practices, optimization of natural inputs, climate-smart and sensitive technologies and practices).

The National Forest Program (2005) commissions to plan and implement actions directed at the sustainable management of forests and forest lands, consistent with the national forest policy and strategy.

The Forest Sector Reform Concept, Strategy, and List of Measures (2017). Aimed at ensuring the balance between social and economic needs, as well as climate-related and environmental requirements.

The National Policy on the management of wildfire in forest lands, specially protected areas, agricultural lands and settlements, the strategy for its implementation, and the list of measures (2015). The purpose

of the Strategy is to enhance the domestic capacity of prevention and response to wildfire by establishing an integrated monitoring and information system, introducing prompt response mechanisms, organizing rapid fire-prevention measures, enhancing prompt fire response capacities, and expanding international cooperation in the field of wildfire management.

The Strategy of household solid waste management system building for 2017-2036 (2016). The priority goal of the strategy is to create a solid waste management integrated system meeting the EU standards, which will provide cost-efficient, technically, financially, and environmentally sustainable services to subscribers.

The National Strategy for Combating Desertification and the National Action Plan (2015). The Strategy emphasizes the importance of legislative improvements related to desertification issues, increasing the effectiveness of land management, raising public awareness on desertification issues, and their solutions, as well as international cooperation.

The National Disaster Risk Management Strategy and Action Plan (2017). The Strategy aims to protect people, their health, property, livelihoods, as well as their production, cultural and environmental values from disaster risks (including those caused by climate change) by increasing the disaster resilience (improving disaster risk information, enhancing disaster risk reduction, strengthening disaster preparedness and improving understanding of fiscal disaster risks and risk financing options).

1.4. Overview of the Armenian Economy and the Budgetary System

Recent economic developments

After a sharp decrease in gross domestic product in 2009 (-14.1% year-on-year) following the 2008-2009 financial-economic crisis, the Armenian economy has been growing since 2010. From 2010 to 2017, the Armenian economy recovered on average by a 3.9% growth rate.

Following robust real GDP growth of 7.5 percent in 2017 and 5.2 percent in 2018, economic performance remained strong in 2019, expanding by 7.6 percent. Among the sectors, services drove growth following an acceleration in tourism output and continued dynamism in trade. Industry also expanded strongly, driven by a rebound in mining production. Inflationary pressures remained low, with an average annual inflation rate of 1.4 percent in 2019 (down from 2.5 percent in 2018), well below the lower band of the Central Bank of Armenia's inflation target range[5].

The labor market has improved, but the unemployment rate remains exceptionally high at 18 percent. Real wages also continue to grow and were higher by 4.5 percent in 2019, though this may not have had an impact on the large segment of the population that remains employed in agriculture and the informal sector.

Table 2. Key macroeconomic indicators for period 2015-2019

Indicators	2015	2016	2017	2018	2019
Gross domestic product (AMD billion)	5,043.6	5,067.3	5,564.5	6,017.0	6,569.0
Gross domestic product (USD million)	10,553.0	10,546.1	11,527.4	12,457.9	13,674.1
GDP deflator compared to previous year, %	101.2	100.3	102.1	102.8	101.5
Consumer price index, compared to previous year, %	103.7	98.6	101.0	102.5	101.4
Gross domestic product per capita (AMD thous)	1,678.6	1,693.4	1,867.7	2,026.6	2,217.4

[5] https://www.worldbank.org/en/country/armenia/overview

Indicators	2015	2016	2017	2018	2019
External public debt (USD million)	4,317.3	4,805.6	5,494.9	5,536.4	5,787.4
Average official exchange rate of 1 US dollar	477.9	480.5	482.7	483.0	480.4
Average population number (1 000 persons)	3,004.6	2,992.3	2,979.4	2,969.0	2,962.5
External public debt (% of GDP)	42.0	46.0	49.0	44.4	42.3

Source: Statistical Committee (www.armstat.am), Ministry of Finance (www.minfin.am).

However, following a strong performance in 2019, the Armenian economy in 2020 was hit hard by the COVID-19 pandemic. The global uncertainty and decreasing demand resulting from the coronavirus crisis, combined with volatility in commodity prices, affected the economy directly via a decrease in exports, which are dominated by copper and other mining products, and indirectly through economic links with Russia, including a likely downturn in remittances. Prolonged measures of social containment and low mobility hurt Armenia's tourism sector, which is largely dependent on visits from Armenians abroad.

The government has proactively responded to the crisis, adopting widespread containment measures while supporting vulnerable individuals and firms in the most affected sectors. Nonetheless, the economy is expected to contract by 1.5%, compared with growth of 5.5% anticipated before the pandemic, with the growth assumed to gradually strengthen by the end of the year and accelerating in 2021. The shutdown and border closures will significantly hit value-added from Armenia's three largest sectors: agriculture, manufacturing, and wholesale and retail trade. However, as economic activities are curtailed, the unemployment rate is expected to increase, and the marked progress in poverty reduction could stall.

The fiscal deficit is projected to widen considerably in 2020 (5% of GDP compared to 2.25% in the 2020 Budget), reflecting the cyclical impact on revenues and higher current spending for healthcare and economic support, with debt expected to rise above 60% of GDP[6].

Armenian budgeting system

Budgetary system

The 1997 Law on Budgetary System of the Republic of Armenia defines the budgetary system and regulates the budgeting process of state and local government agencies. The budgetary system in Armenia has two levels: a) state budget and b) community (local) budgets. There is no other (middle) level (e.g., regional) in the Armenian budgetary system. The process of budgeting includes the legally regulated activities of state and local government agencies for drafting, discussing, adopting and executing of annual budgets and approval of the annual report on budget execution.

Budget preparation process

The development of Armenia's budget consists of two phases:

- The Ministry of Finance develops a 3-year Medium-Term Expenditure Framework (MTEF) based on inputs from line ministries. Once approved by the government, the MTEF is submitted to the National Assembly for their information by 20 July.
- Based on the MTEF, the government submits a draft annual budget for the review of the National Assembly 90 days before the start of the fiscal year (which coincides with the calendar year). Once

[6] https://www.imf.org/en/Publications/CR/Issues/2020/05/22/Republic-of-Armenia-Second-Review-Under-the-Stand-By-Arrangement-Requests-for-Augmentation-49455

approved by the National Assembly, the government executes the budget and has the responsibility to prepare annual and quarterly reports.

Thus, any spending program/measure, including those related to climate change adaptation and mitigation, is represented in the MTEF and correspondingly in the annual budgets. Any changes to financing, execution, and other aspects of programs are decided by the Government with the prior endorsement of the National Assembly given in the annual budget law.

Program-based budgeting

In 2019 Armenia has fully transitioned to Programme-Based Budgeting (PB), which has been one of the main Government's priorities since 2011. The introduction of PB aimed to establish a better linkage between budget and policy objectives and outputs, thus improving the accountability, transparency, and efficiency of public spending. Since then, all budget documents are prepared and presented in the PB formats through the introduction of new independent Program classification and presentation of the goals/objectives and non-financial (outcome and output) indicators for budget expenditures in budget documents. This will facilitate CPEIR's access to non-financial information, such as goals, outcomes, and output data, which line ministries have provided to the MoF together with their budget information.

Table 3. Composition of State budget revenues and expenditures for period 2015-2019

Indicators	2015	2016	2017	2018	2019
Revenues, total (AMD bln.)	1,167.7	1,171.1	1,237.8	1,341.7	1,565.5
Tax incomes and duties (AMD bln.)	1,067.9	1,079.7	1,157.9	1,258.1	1,464.3
Official transfers (AMD bln.)	29.9	31.4	14.6	11.2	12.4
Other incomes (AMD bln.)	69.9	59.9	65.1	72.3	88.8
Expenditures, total (AMD bln.)	1,408.9	1,449.1	1,504.8	1,447.1	1,629.4
Current expenditures (AMD bln.)	1,238.9	1,281.8	1,267.4	1,298.9	1,508.1
Transaction with non-financial assets (AMD bln.)	170.1	167.3	237.4	148.1	121.4
State budget deficit (AMD bln.)	(241.2)	(277.9)	(267.1)	(105.4)	(63.9)
Expenditures (% of GDP)	27.9	28.6	27.0	24.0	24.8
State budget deficit (% of GDP)	-4.8	-5.5	-4.8	-1.8	-1.0

Source: Statistical Committee (www.armstat.am), Ministry of Finance (www.minfin.am).

2. OBJECTIVES AND THE SCOPE OF THE CLIMATE CHANGE BUDGET TAGGING (CBT) AND PUBLIC EXPENDITURE AND INSTITUTIONAL REVIEW (CPEIR)

2.1. Objectives of the Assignment

The overall objective of the assignment is to review the budget expenditure on climate change-related activities and to assess the extent to which this expenditure is supported by existing policy and institutional responsibilities. Based on the review, the assignment aims to generate recommendations for improving the climate relevance of public expenditure in the future and integrate climate change finance in the Armenian budgeting system.

More specifically, the assignment seeks to achieve are the following objectives:

- Quantify climate-related expenditures through the budgetary system.
- Provide a tool to track climate finance through national delivery channels.
- Identify opportunities and constraints for integrating climate change within the national budget allocation and expenditure process.
- Serve as a starting point to strengthen cross-government coordination.
- Strengthen stakeholders' capacity to formulate more informed policy proposals that respond to climate change.

2.2. Scope of the Assignment

The scope of the assignment is the following:

Reference framework: The CPEIR will assess specific expenditures against CPEIR standard typology of climate change mitigation and adaptation expenditures. Also, an attempt will be done to assess the expenditures against development objectives, expressed in national policies and strategies.

Coverage: The expenditure review and analysis will cover state budget expenditures.

Sectors: The review and analysis will cover all sectors, yet more specific focus will be on climate change-related sectors, such as environmental protection, forest, agriculture, disaster management, solid waste management, water management, and energy sectors.

Period of analysis: The review will cover the period from 2017 to 2019.

Type of expenditures: The expenditure review and analysis will cover both recurrent and capital expenditures included in the state budget.

Sources: The review will cover budget programs/measures financed both form donor and national sources.

2.3. Stakeholders of the Assignment

Active involvement of the key governmental stakeholders is critical to move forward efficiently in this government-wide process and to ensure the ownership and participation, efficient implementation of the capacity building related to CPEIR and CBT initiative, and its sustainability.

The Ministry of Finance is one of the key stakeholders of the assignment, as an institution that is leading and coordinating PFM reforms and has a critical role in budget planning, execution, and reporting. Another agency to have a primary role to implement the CPEIR and CBT and to ensure its sustainability in the future is the Ministry of Environment.

Initial review of CC policy and budget data for recent years shows that the major part of the central government expenditure which directly or indirectly are CC adaptation or mitigation related rest within the

responsibly of the following 4 line ministries: 1) Ministry of Environment (MoEn); 2) Ministry of Territorial Administration and Infrastructures (MoTAI), 3) Ministry of Economy (MoEc), and 4) Ministry of Emergency Situations (MoES).

Ministry of Health (MoH) and Ministry of Education, Science, Culture and Sport (MoESCS) are also identified to be included in the list of governmental stakeholders taking into account specific climate change adaptation or mitigation related activities carried out by them.

As a portion of CC related public expenditure are executed at Yerevan Municipality (YM) level, consultations with YM will be important for better understanding and information sharing. In this context, YM will be included in the stakeholder list to complement consultations and dialogue with the Ministry of Territorial Administration and Infrastructures (MoTAI).

Therefore, the list of governmental stakeholders can be summarized as follows:

- Ministry of Finance (MoF);
- Ministry of Environment (MoEn);
- Ministry of Economy (MoEc);
- Ministry of Territorial Administration and Infrastructures (MoTAI);
- Ministry of Emergency Situations (MoES);
- Ministry of Education, Science, Culture and Sport (MoESCS);
- Ministry of Health (MoH);
- Yerevan Municipality (YM);

The details of the governmental stakeholder mapping are presented in **Annex 1**.

Apart from key governmental stakeholders, other partners (e. g., donor agencies (GIZ, UN agencies, the World Bank, etc.)) will also be communicated during the implementation of the assignment. The collaboration may include data and information exchange, as well as coordination of activities, if it would be appropriate.

3. ASSESSMENT OF CLIMATE CHANGE BUDGET INTEGRATION AND CCBII CALCULATION

As a first step, an assessment of the level of integration of climate change finances in the current Public Financial Management System of Armenia will be conducted using the Climate Change Budget Integration Index. The index will be further used for assessment of country progress in integrating the climate change in budget systems.

The assessment and index calculation will be conducted based on the methodology developed by the UNDP which has been successfully piloted in several countries[7]. The methodology provides a multi-component assessment mechanism where several aspects of CC integration into PFM systems will be independently assessed. The objective of the assessment and the index is to assess the PFM practices and the system on whether it is an enabling factor for the achievement of climate change policy outcomes.

The assessment and respective index calculation will evaluate climate change mainstreaming in terms of the following 4 dimensions, however, each of the fixed dimensions is divided into several categories and subcategories to facilitate query and grading:

- **Policy dimension** – the level of awareness on climate change policies, recognition and commitment to integrate CC, as well as the availability of enablers to link CC policies with budgets;
- **System dimension** – the capacity and current practices of PFM systems to absorb CC dimension;
- **Accountability dimension** – how much is the CC dimension is part of the overall PFM accountability system;
- **Development Partners dimension** – how much is DPs' CC finance integrated into national PFM systems.

Under the four dimensions, there are ten categories of assessment with a maximum of 10 points for each. The list of categories under each dimension is presented in table 4 below.

Table 4. Classification of CCBII dimensions, categories and weighting factors

Dimension	Dimension Weight	Category	Category Weight
P. Policy	30	P1. Policy	10
		P2. Requirements	10
		P3. Priorities	10
S. System	30	S1. Reporting	10
		S2. Coding	10
		S3. Calculation	10
A. Accountability	30	A1. Performance	10
		A2. Parliament	10
		A3. CSO	10
D. Donors	10	D1.	10
CCBII	**100**		**100**

Each of the categories and subcategories will be graded based on the standardized grading options. The comprehensive list of categories and subcategories and the grading options are presented in **Annex 3** of this document.

[7] "Measuring the integration of climate change in PFM systems (draft for piloting purposes)", https://www.climatefinance-developmenteffectiveness.org/sites/default/files/topic/pdf/Measuring%20the%20integration%20of%20climate%20change%20in%20PFM%20systems%20(CCBII).pdf

The following formula will be used to calculate the CCBII:

$$S = \sum_{k=1}^{n} (\sum_{i=1}^{m} A_{ki}) \text{ , where}$$

S - is the CCBII score;

A_{ki} - is the score of the subcategory (i) of the category (k);

k - is the number of category;

i - is the number of subcategories.

The CCBII will be calculated as a total sum of the scores for each category/dimension. The maximum score for the index is 100, showing the highest level of CC integration (CCBII) into the PFM systems.

The assessment will be mainly conducted in the form of desk review, while some subcategories will be assessed with close collaboration with country offices, including data collection and confirmation of the specific parameters with the government stakeholders. The assessment will involve two aspects. First, a critical analysis of GOA's existing CC policies, plans and strategies, budget documents, budget planning and preparation guidelines, budget speech, and national planning documents will be done to have an in-depth understanding and to extract the relevant information for developing Armenia's CCBII. Second, interviews with government officials involved in CC budget planning, execution, and monitoring from various institutions will be carried out to dig out the practice and identifying the reality.

The assessment process for each category will flow bottom-up and start from the lowest level upwards, i.e. the subcategory will not get the next higher rank unless the lower rank is not proven to be met and/or exceeded. The information to be used in the assessment will be for the last completed fiscal year (2019). When 2019 data for a specific case is not available, the relevant data for 2018 will be used. All these exceptions from the general approach will be documented and presented in the assessment.

After the completion, the CCBII assessment, together with the proposed CBT methodology, will be presented to key stakeholders and discussed with them. For that purpose, a workshop will be organized to facilitate consultations and dialogue with the key stakeholders to validate the CCBII results and the methodology. The views and opinions expressed by key stakeholders will be taken into account.

Apart from key governmental stakeholders, other partners (e. g., donor agencies (GIZ, UN agencies, the World Bank, etc.)) will also be communicated during the assessment. The collaboration may include data and information exchange, as well as coordination of activities, if it would be appropriate.

Limitation - The majority of the development partners' longstanding practice of not using the treasury or PFM system for grants financing of CC programs by the government and allocating climate funds to NGOs or CSOs directly prevents full integration. This will create complications for data collection and analysis for the Donor dimension.

4. CPEIR PROCESS AND METHODOLOGY

The CPEIR is a diagnostic tool that has been developed to assess opportunities and constraints for integrating climate change concerns within the national and sub-national budget allocation and expenditure process. A CPEIR provides a qualitative and quantitative analysis of a country's public expenditures and how they relate to climate change, its climate change plans and policies, institutional framework, and public finance architecture.

The CPEIR will be conducted in the following 3 dimensions:

- **Policy Review:** A review of the climate change policy framework and its monitoring framework as well as how the policy objectives translate into programs and instruments.
- **Institutional Review:** The institutional nexus related to CC policy delivery, and the modes of cross-government synchronization, accountability, and decentralization.
- **Climate Public Expenditure Review:** Quantifies the climate-relevant expenditure out of the total national budget.

4.1. Policy Review

Review of existing climate and relevant policies

The review of the climate change policy framework in Armenia will be conducted. The review will be conducted through mapping, collecting, and reviewing the relevant policy documentation as well as through a series of interviews with subject matter experts.

The following main questions will be addressed:

- What are the documentation for climate change policies: strategy/action plan?
- Is there any climate change action plan at the sector level?
- Are there any other sustainable development, green growth, and disaster risk management policy frameworks that might have relevance to climate change response?
- How climate change policy is related to national development plans?

Policy coherence

The consistency between high-level sectoral policy statements and climate change action plans and the consistency of the national response and the global agreements on climate change will be analyzed.

The following main questions will be addressed:

- How much policy attention does climate change receive within national development planning?
- Are the national climate actions (adaptation and mitigation) responsive to the priority areas identified in the vulnerability assessments? If not, where are the gaps?
- Are climate change goals, strategies and action plans consistent with green growth goals and disaster risk management strategies and action plans?
- Does the national climate change response reflect the climate change commitments and decisions at the UNFCCC and global levels? What is the status of reporting through the National Communications?

Evidence for policymaking

The analysis will be conducted to assess whether climate change policymaking has been based on sufficient evidence such as research and analysis of climate science, vulnerability assessments of climate impacts, and costing of climate actions. Such research and analysis may emanate from the public sector, civil society, and the private sector.

The following main questions will be addressed:

- Are there scientific assessments of climate change impacts available to the policy-making process? How are these assessments being used during climate policy formulation, including the development of climate change strategies and action plans, at national and sectoral levels?
- Are there any regulatory impact statements conducted for the formulation of climate policies?
- In the policy formulation process, was stakeholder participation ensured.
- Are any cost-benefit analyses (CBA) or multi-criteria analyses (MCA) conducted to support the policy recommendations?

Monitoring and evaluation framework

The monitoring and evaluation framework for climate change strategies, action plans and policies will be analyzed.

The following main questions will be addressed:

- Is there a monitoring framework for the national climate change strategy and action plan? Is the framework coherent? Are there gaps in their coverage? Has there been a baseline established?
- Is there any overarching monitoring and evaluation framework for mitigation and adaptation? If so, what are the challenges and lessons learned in adopting such a framework?
- If the country has national climate funds, what is the monitoring framework for such funds?

4.2. Institutional Review

Climate policy coordinating mechanisms

The climate change policy coordinating mechanism in Armenia will be analyzed. It will determine if a lead agency exists, which has the formal mandate for coordinating climate policies as well as a cross-agency institutional set-up to ensure climate policy oversight and coordination across different sectors. The analysis will help to identify the gaps and challenges (if any) as well as opportunities in strengthening the national climate policy coordinating mechanism.

The following main questions will be addressed:

- Is there a formal coordinating agency? If not, which agency is (informally) assuming that role at the moment? If yes, what is/was the reasoning for appointing such agency as the formal coordinating agency?
- Is there clarity in the mandates and jurisdiction of the entities tasked with coordinating climate policy design?
- Does the coordinating agency have the leverage to convene other key stakeholders?
- Is there a formal cross-agency institutional arrangement? At which level, ministerial and/ or technical working group level? How are finance and planning ministries involved in such institutional set-up?

Institutional arrangements within the budget and planning process

The decision-making process in Armenia for translating climate policies into budget allocations and expenditures (i.e. integrating climate change into budgeting process), and the institutional arrangement for coordination of climate policy formulation and budget submissions will be analyzed. The analyses will help to identify potential weaknesses in the policy-budget linkages and areas of political economy dynamics around budget and budget execution.

The following main questions will be addressed:

- What is the typical budgeting and planning process of the country?

- Is there an institution that is in charge of the reconciliation of climate change-related policies with the fiscal and budget framework?
- Are there factors at budgeting and budget execution stages that might have put climate change programs in lower priority?

Accountability institutions

The accountability institutions whose role is to ensure accountability of those formulating and implementing climate policies in Armenia will be analyzed. Those include the institutions tasked with the policy coordination and monitoring of climate change issues and impact, the Supreme Audit Institution, and the Parliament to whom the government answers to in terms of its climate change policies.

The relevant accountability institutions currently working in the national context will be mapped out and the extent to which they are involved in climate change issues will be assessed. An attempt will be done to identify donors' accountability mechanisms on climate change projects and assess whether it is aligned with and complementing the national accountability system.

The following main questions will be addressed:

- What institutions are currently ensuring accountability of policy implementation and government spending? Do they include climate change as part of policy issues under their mandates?
- Do donors establish any accountability mechanisms for climate change-related projects and programs funded by them in the country? Are these mechanisms effective in complimenting and strengthening the domestic accountability institutions?
- Are monitoring reports and evaluations of climate change strategies, programs, and action plans publicly available and current?
- Has the Supreme Audit Institution published any report on "environmental and/or climate change policy performance"?
- Are budget execution reports on climate change programs made available (if any) and variation between plans and execution explained?
- How useful is such information for CSOs and other accountability institutions?

4.3. Climate Public Expenditure Review Process and Methodology

From the Public expenditure review perspective, the role of the CPEIR is to aggregate spending across the area of CC, to provide information on spending and allocation and to link this to policy objectives. However, the expenditure review process in CPEIR is quite challenging because of the disaggregation of expenditure across many government bodies.

The climate budget emerging from the CPEIR is not just a single figure or percent of national budget related to CC response. Linking climate expenditures to the key types of the CC response (adaptation and mitigation), to multiple policy objectives and involved institutions, requires a climate budget that can be disaggregated into various sub-budgets which may be related, for example, to the sector, intervention type or policy objective.

In methodological terms, the climate budget is made through the aggregation of separate climate-related elements. In this review, the data will be collected by budget appropriation lines and then aggregated to form an overall governmental climate budget. This basic process forms the core of the climate budget.

A three-phase process will be undertaken for each budget line:

- **Identifying CC relevant expenditure**: Budget lines with climate relevance will be selected as subsets of the overall data for further analysis.
- **Classifying CC relevant expenditure:** Budget lines with climate relevance need to be classified in a manner that makes them useful for policymakers

- **Weighting climate relevance**: The proportion of the expenditure of the budget line that is related to CC outcomes will be determined (weighted).

The following sections provide more methodological detail on the three stages of analysis identified above although as discussed below, the discussion groups together the discussion of the identification and classification activities. An important aspect of this procedure is the critical importance of data availability, accessibility, consistency, and exclusions related to governmental budgets, which in practice will make the formation of a retrospective climate budget a relatively involved procedure.

4.3.1. Identification and classification of CC-relevant expenditures

Determining the 'level' for identifying and classifying CC expenditures

The first stage in the process is to decide how to interrogate the state budget.

Expenditures in the state budget of Armenia are classified according to the economic, functional, program, and administrative classifications listed in the country's budget classification.

According to this, the budget information is classified in the following four main dimensions: (i) the administrative classification, which structures the budgetary expenditures by identifying the responsible agencies of government spending, (ii) the functional classification, which categorizes expenditure according to the functions of government, (iii) the program classification, which structures the budget expenditure according to the goals/objectives for which they are intended and (iv) the economic classification, which specifies the type of expenditure, e.g. wages, interest payments, transfers, goods and services, etc., and the nature of each expenditure, whether current spending or capital spending.

The review of 2017-2019 budgets shows that after the full introduction of Program Budgeting (PB) in 2019, the budget classifications and their presentation in budget documents have undergone significant changes. In particular, a new Program classifier, independent from Functional classification, has been introduced. In the past, budget allocations were approved at the level of "programs" under the functional classification, but after the introduction of PB, those "programs" under functional classification are eliminated and budget allocations are approved at the level of Program measures of Program classification. Now, the budget expenditures in the budget law are presented only by Program and Administrative classifications, and the Functional and Economic classifications of budget expenditures are presented only in the GoA decision on the measures ensuring the execution of the budget.

In addition to the changes in budget classifications, budget programs and measures have undergone significant revisions in 2019, to bring their design and content in line with PB methodology.

Although the Administrative classification itself has not been changed, the presentation of budget expenditures by Administrative classification has also changed in budget documentation. In the past, the responsibility for budget expenditures was defined at a single departmental level, but since 2019, two Administrative levels are presented in budget documentation (GoA decree).

The structure of the RA Government has also undergone significant changes during the period under review, which in many cases has also affected the administrative responsibility for the expenditures, the names and descriptions of the programs and measures.

Review of budget data for 2017-2019 shows that the budget data are disaggregated by the levels of classifications demonstrated in Table 5.

Table 5. Levels of disaggregation of state budget expenditure

Classification	Level	Description	Examples
Administrative Classification *(It allows spending to be associated with those responsible for managing and executing it)*	Level 1	2 groups of Agencies: • Chief managers of budget allocations (are defined in the budget law starting from 2019) • Agencies responsible for program measure execution (defined by the GoA decision)	Ministry of Environment
Economic Classification *(It seeks to differentiate between capital and current expenditure. Before 2019 was defined by the budget law. Staring from 2019 is defined by the GoA decision)*	Level 1	Aggregation in 2 groups	▪ Current expenses ▪ Transactions with non-financial assets
Economic Classification	Level 2	Disaggregation: Group 1 – 7 sub-groups Group 2 – 2 sub-groups	▪ Acquisition of services and goods ▪ Costs related to non-financial assets
Economic Classification	Level 3	Aggregated line items	▪ Continuous costs ▪ Fixed assets
Economic Classification	Level 4	Line items	▪ Energy costs ▪ Acquisition of buildings
Functional Classification *(Thematic classification which seeks to identify the area/government function that spending seeks to advance. Before 2019 was defined by the budget law. Staring from 2019 is defined by the GoA decision)*	Level 1	Division	Environmental protection
Functional Classification	Level 2	Group	Environmental protection (not classified in other groups)
Functional Classification	Level 3	Class	Environmental protection (not classified in other groups)
Program Classification (*Thematic classification, which seeks to identify the objective/purpose for the spending. Before 2019 was a line under the Functional classification. Separate budget classification starting from 2019)*	Level 1	Program	Environmental Impact Assessment and Monitoring
Program Classification	Level 2	Measure/Activity	Environmental monitoring and information provision

The expenditure reviews for 2017-18 will be conducted at the "program", and for 2019 at the level of program measures of program classification i.e. in 2019 at the lowest level of granularity possible. In 2017-18, on average around 65 ministries and agencies annually have been involved in budget execution of 700-750 "programs", while in 2019 the number of ministries and agencies was 52 and the number of executed program measures was 1137.

The preliminary study of budget expenditures for 2017-2019 shows that it is often difficult to identify how the relevant expenditures in 2019 were presented in budget documents of previous years, hence the changes in budget expenditure classifications, and substantive revisions of budget programs and measures, can be a significant constraint for database development, expenditure tracking and comparison for the last three years. This will complicate expenditure analysis, comparison, and require more in-depth research and additional information.

Determining and classifying relevant expenditures

The proposed starting point for determining and classifying actions as climate-relevant is Armenia's Nationally Determined Contribution. This reflects the actions, and the classification of those actions, that the country has decided (and publicly declared) to take to respond to climate change. As such, it represents the most important source of nationally-owned information on the actions that the country intends to take to address climate change, and hence what expenditures should be included within the analysis.

This will be supplemented with international sources of information on activities that are associated with emission reductions or climate resilience include the following:

- **The MDB approach to tracking climate finance**[8]. For mitigation activities, this provides a specific list of activities that can be considered as supporting emission reductions: 71 activities are listed, grouped into 32 sub-categories and 10 categories. It focuses on the type of activity rather than its purpose.9 For adaptation, a different approach is taken, in which activities are considered to be adaptation-related if the climate change vulnerability context of the activity is identified, that there is a an explicit statement of intent that the activities will reduce climate change vulnerability, and if there is a clear and direct link between (some of) the activities and the objective to reduce vulnerability. Despite this process-based approach for identifying expenditures, the report provides some example case studies of adaptation related activities.

- **EU taxonomy:** the European Parliament has recently adopted the Taxonomy Regulation10 (Council of the European Union, 2019). Although primarily focused on supporting private-sector investment, this provides the world's first-ever green list, to help identify projects and economic activities that have a substantial positive impact on the environment. It provides nine categories of mitigation activities as well as a process for identifying adaptation activities. The Technical Expert Group that supported the development of the Taxonomy regulation provide a much more detailed report on

[8] African Development Bank, Asian Development Bank, European Bank for Reconstruction and Development, European Investment Bank, Inter-American Development Bank Group, Islamic Development Bank and the World Bank Group (2019) 2018 Joint Report on Mulitlateral Development Banks' Climate Finance. Available at: http://pubdocs.worldbank.org/en/650791574955718829/2018-joint-report-on-mdbs-climate-finance.pdf

[9] See Annex C of the said Joint Report in particular.

[10] Council of the European Union (2019) Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on the establishment of a framework to facilitate sustainable investment. COM (2018) 353 Final. Available at: https://data.consilium.europa.eu/doc/document/ST-14970-2019-ADD-1/en/pdf

activities that can be considered to be linked to climate change mitigation and adaptation, including associated thresholds where necessary[11].

We also intend to classify climate related expenditures using a framework that is based heavily on Armenia's NDC. This will be advantageous as it means that the results of the expenditure analysis can be compared with the national policy statements to understand the extent to which the different classified activities are, or are not, receiving budgetary resources. Table 6 below illustrates the proposed classification.

Table 6 Categorisation and illustrative activities in Armenia's CPEIR

Adaptation			Mitigation		
Policy dimension	**Objective**	**Indicative activities**	**Policy dimension**	**Objective**	**Indicative activities**
Natural ecosystems and biodiversity	Conserve ecosystems and biodiversity threatened by climate change	Afforestation and reforestation, actions to reduce desertification, protected areas	Energy	Emission reduction in the production and consumption of energy	Renewable power and heat development, energy efficiency
Water resources	Rational and sustainable water use and flood protection	Additional storage capacity, flood protection of infrastructure, upgrading drainage, leakage reduction	Transport	Emission reduction in delivering mobility	Mass transit, active transit, improved vehicle efficiency, electric vehicles
Agriculture	Reducing exposure and/or vulnerability to climatic conditions	Change in crop types, efficient irrigation, soil conservation measures,	Agriculture	Emission reduction in crop and livestock production	Intensification of agriculture, changing livestock patterns,
Human settlements and infrastructure	Reduced exposure and/or vulnerability of citizens and assets to changing climatic conditions	Flood, heat and other hazard protection of infrastructure, development of emergency response plans,	Industrial processes	Emission reduction in industrial processes and cooling	Switches to lower-carbon cement, cooling agents with lower GHG intensities
Human health	Ensure human health under projected climate change	Spending against (climate-related) diseases	Waste	Emission reductions in the collection, processing and treatment of waste	Increased recycling, waste to energy projects, collection
Energy	Ensure efficient delivery of energy services under climate change	Flood and heat protection of infrastructure	Land use and forestry	Emission reductions from changing land use patterns and management and through enhancing carbon stocks	Afforestation, reforestation, reduced deforestation, sustainable forest management
Cross-cutting	Education. research planning and policy delivery to enhanced climate resilience	Development of policies and action plans, development of climate models	Cross-cutting	Education. research planning and policy delivery to reduce emissions	MRV of emissions, carbon finance related activities

4.3.2. Weighting climate-related expenditures

Different activities contribute to support climate mitigation and adaptation to differing extents. Some activities, and associated expenditures, are only undertaken because of a country's commitment to address climate change. By contrast, other activities are largely undertaken for other reasons but may nonetheless make varying contributions to addressing climate change. In order to be robust, it is important for the expenditure analysis to recognize this difference in its weighting approach. This weighting adjusts the budgeted expenditure by a factor of 0-100%.

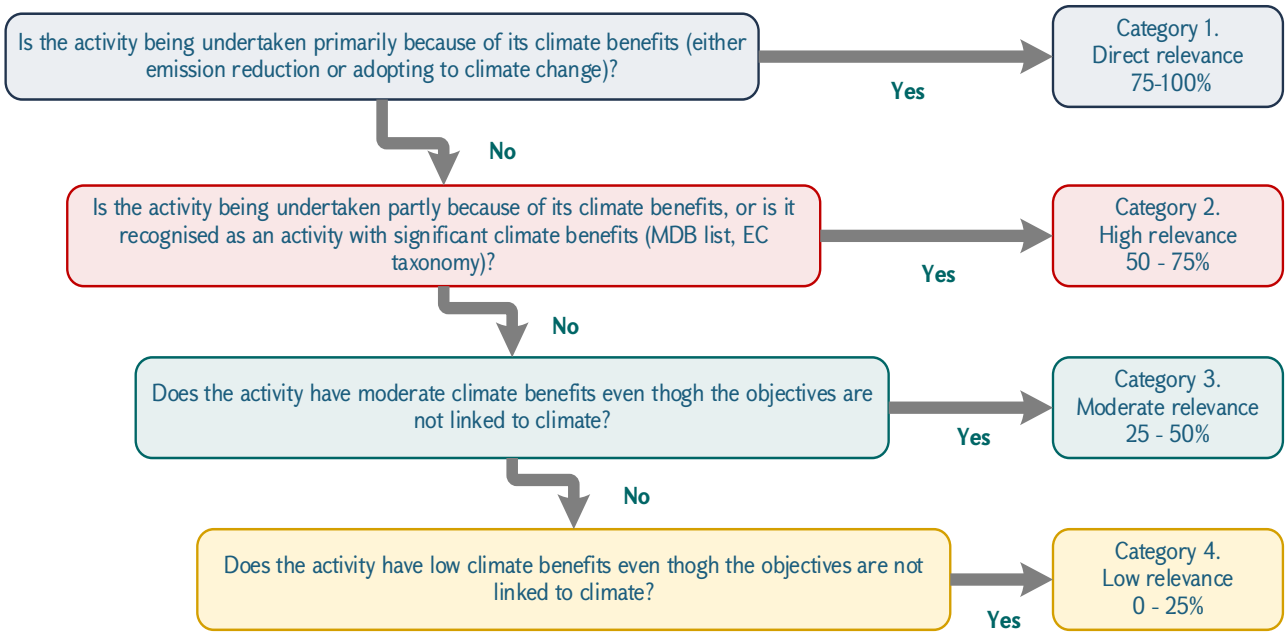
It is intended that the approach used to determine the weights will take account of two separate but related considerations:

- **The purpose/objective of the spend –** in other words, whether or not there is a stated intent that the spending will help to reduce emissions or enhance climate resilience
- **The impact of the spend – the** extent to which the spending is actually expected reduce emissions or increases climate resilience (regardless of whether that was the stated intent for that spending).

Figure 1 below illustrates how these considerations will be combined.

[11] Technical Expert Group on Sustainable Finance (2020) Technical Report. Available at: https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/200309-sustainable-finance-teg-final-report-taxonomy_en.pdf

Figure 1 Combining purpose and impact in a weighting system



As such, expenditures will fall into one of these four categories depending on the characteristics of the activity it supports and the intention of the spending. The CPEIR will provide a full explanation for why an activity and expenditure has been allocated to each of these four categories.

- **Category 1 (75-100%):** This will be reserved for activities where there is an explicit statement that the activity is primarily intended to reduce emissions or enhance climate resilience/adapt to climate change.
- **Category 2 (50-75%):** This will be used for activities where climate benefit is only a secondary reason for undertaking the activity or where there was no intention for the activity to enhance climate adaptation or reduce emissions, but there is demonstrable (international) evidence that the activity will have this effect. Mitigation activities that fall into this category might be largely identified from the list of mitigation activities developed by the MDBs, with a few exceptions as discussed in category 3 below. For example, energy efficiency activities undertaken for energy security reasons, but which also reduce emissions, would be in this category. Adaptation activities expected to reduce exposure to, or hazard intensity of, climate impacts; or directly reduce climate vulnerability would also be in this category (See box 1 below for a discussion of terms related to adaptation). For example, afforestation activities directly reduce the hazard intensity of floods and landslides, while the use of more efficient irrigation systems makes farming communities less vulnerable to water shortages.
- **Category 3 (25-50%):** This will be used for activities where there is no intention to deliver climate outcomes but where there are nonetheless expected to be some moderate climate benefits from the expenditure. In relation to mitigation, this might mean activities that reduce emissions, but where there is a risk that the activities might not be consistent with the overall temperature goals of the Paris Agreement because they are still emissions intensive. For example, expenditures related to gas-fired power generation might be included in this category. In relation to adaptation, this may relate to activities that enhance outcomes in climate sensitive sectors (for example, agriculture) but where the activity does not directly reduce the exposure to, or the intensity of hazards associated with, climate change, nor directly target climate vulnerability, but instead reduces vulnerability to any potential future hazards and/or improves the capacity to cope with or adapt to climate impacts. For example, improving water quality or enhancing food security among generally vulnerable communities might fall in this category.

- **Category 4 (0-25%):** Low climate benefits. This will be reserved for adaptation-related spending and can be used for activities that reduce general vulnerability or enhance coping or adaptive capacity but which are not targeted at those people, communities or assets that are particular exposed or vulnerable to climate change. For example, general education and health spending might be included in this category.

Box 4. Key terms related to adaptation and resilience[12]

In relation to climate risks and adaptation, a number of different terms are often used. The CPEIR will follow the IPCC in how these terms are used

- **Hazard** relates to the possible, future occurrence of natural or human-induced physical events. Some of these hazards e.g. floods are related to climate change; others such as earthquakes or pandemics will not.
- **Exposure** relates to the people, assets and other elements that might be affected by a (climate-related) hazards. For example, exposure is increased by building settlements on a flood plain.
- **Vulnerability** refers to the extent to which those that are exposed suffer adverse effects when impacted by hazard events. There are some factors which directly increase or decrease vulnerability to specific climate hazards – for example, houses with basements will be particularly vulnerable to floods but not necessarily to windstorms. Other factors such as poverty, tend to increase vulnerability to all hazards (climate related or otherwise).
- **Adaptive and coping capacity** refers to the positive features of people's characteristics that may reduce the risk posed by a certain hazard. For example, healthier and more educated people are better able to cope or adapt to climate-related hazards.

Once an activity and associated expenditure has been allocated to a category, there is scope for further adjustment within the category. There is a 25-percentage point range within each category. This allows those undertaking the CPEIR to recognise that activities within the same category may have larger or smaller climate-related impacts. As with the allocation to categories, the rationale for identifying some activities within a category as having larger or smaller climate impacts will be clearly stated.

The flexibility to alter weightings within a category can be particularly important in a context in which some activities deliver both adaptation and mitigation impacts. For example, afforestation and reforestation activities have both a carbon sequestration benefit (mitigation) and reduce the intensity of floods, an adaptation benefit. As such, this activity might score towards the high-end of whichever category it is allocated (category 1 if there was an explicit climate justification for undertaking afforestation or reforestation, category 2 otherwise).

This overall approach combines both the intention and the impact of the expenditure but is different from the 'benefits approach' identified in some literature. Under this approach, the weights themselves are

[12] Cardona, O.D., M.K. van Aalst, J. Birkmann, M. Fordham, G. McGregor, R. Perez, R.S. Pulwarty, E.L.F. Schipper, and B.T. Sinh, (2012) Determinants of risk: exposure and vulnerability. In: Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation [Field, C.B., V. Barros, T.F. Stocker, D. Qin, D.J. Dokken, K.L. Ebi, M.D. Mastrandrea, K.J. Mach, G.-K. Plattner, S.K. Allen, M. Tignor, and P.M. Midgley (eds.)]. A Special Report of Working Groups I and II of the Intergovernmental Panel on Climate Change (IPCC). Cambridge University Press, Cambridge, UK, and New York, NY, USA, pp. 65-108. Available at: https://www.ipcc.ch/site/assets/uploads/2018/03/SREX-Chap2_FINAL-1.pdf

determined by the percentage of the benefits that are climate-related[13]. For example, spending on public transport might be given a weight of 5% if it was estimated that the 5% of the programme was associated with reducing emissions (with the other 95% of the benefits being related to reducing congestion, greater accessibility, better air quality etc.) It is not recommended that the benefits approach is used as it will require detailed calculations that are not likely to be possible within the constraints of this analysis. Moreover, the necessary calculations are likely to be very sensitive to uncertain parameters. Rather, under the planned methodology, the expected benefits (impact) helps determine which category and hence which weight should be used, but there is not a 1:1 relationship between the estimated share of the benefits that are climate-related and the weight that is applied in the CPEIR.

4.3.3. Assessment of Climate Change Public Expenditure

The procedure for classification of CC public expenditures and determination of weights for program measures will be first applied to the data for 2019, and then will be expanded to data covering the period from 2017 to 2018.

Following the classification and assignment of corresponding weight factors, CC public expenditure will be assessed, specific indicators calculated and analytical tables and charts will be prepared.

The Data analysis will include the following (but not limited to):

- Total budget allocations and outturns:
  - by types of expenditures: recurrent vs. capital (to the extent possible);
  - by source: domestic vs. external.

- Total Climate Relevant expenditures:
  - by types of expenditures: recurrent vs. capital (to the extent possible);
  - by source: domestic vs. external;
  - by CC relevance;
  - by CC response: adaptation, mitigation, cross-cutting;
  - by administrative agencies: agencies/ministries with most allocations;
  - by functional classification;
  - by type of intervention.

- Proportional analysis:
  - CC relevant expenditures as a proportion to total government budgets/expenditures;
  - CC relevant expenditures as a proportion to GDP.

Given the availability of corresponding budget information, it generally will be possible also to compare planned vs. actual expenditures for the indicators above.

Further, the results will be used to develop the CPEIR report. The report will, among others, address the following questions:

- Is there a match between the allocated resources and the Government's priorities, policies in the CC area?
- Are expenditures on CC mitigation and adaptation at an appropriate level to effectively address the CC issues?
- Are resources allocated equally (e.g. by sectors, geographically, etc.)?
- Is the MTEF used to improve the allocation of resources?
- What are the factors causing the deviation between budget allocations and actual expenditures?

[13] Resch, E., Allan, S., Giles-Alvarez, L. and Bisht, H. (2017) Mainstreaming, accessing and institutionalizing finance for climate change adaptation. Available at: http://www.acclimatise.uk.com/wp-content/uploads/2018/02/OPM_ACT_LP_finance_for_climate_change_adaptation_FFRG.pdf

- What are the current challenges and difficulties?

For determining whether the budget for CC in the country is at an appropriate level, the results will be compared with other countries in the region or with similar levels of per capita income that have undertaken comparable exercises.

Key budgetary data to be considered

- Annual state budget execution reports;
- Program/project documentation from relevant line ministries and government agencies
- Information on financial and non-financial indicators in program-based budgeting format included in annual state budget execution reports;
- Budget requests for 2019-2022 MTEF and 2019 annual budget submitted by line ministries to the Ministry of Finance;
- Additional data from line ministries and government agencies;
- Budget Program Passports;
- Any relevant additional information from Development partner organizations;
- Statistical data and publications available on the Statistical Committee's web page;
- World Bank BOOST database on public finance indicators.

4.4. Limitations and Challenges

Due to the cross-cutting nature of climate change-related policy and expenditure in Armenia, as well as based on the experience of other countries that have conducted similar studies, the following issues have been identified as potential limitations and challenges of the study.

- The study of international experience shows that the definition of climate change itself, and its distinction from other developmental goals is a challenging task, and in many cases is based on expert judgment.
- The identification of specific weighting factors is also a challenging task. While this report sets out a proposed approach that is intended to be as objective and transparent as possible, it will nonetheless be necessary to rely on expert judgments.
- Climate change policy is usually cross-sectoral, and there are many stakeholder agencies directly involved in the policy implementation. Often, climate issues are not properly reflected or articulated in sectoral policies, and, as a result, they are not considered by relevant agencies as an important policy dimension. A large number of stakeholders can cause coordination issues and increase the volume of the work. Also, the lack of climate-related focus and awareness in ministries can appear as a significant impediment to the assignment.
- Budget allocations, expenditure controls, and accountability in Armenia are mainly implemented at budget program measures level, which in budget documents are often presented at a rather aggregated level. Although the budget documents present the goals, objectives, outcomes, and outputs of budget programs and measures, they rarely reflect climate-related information, because of the cross-sectoral nature of climate policy. Hence the existing budget information is generally not sufficient for analysis, and more detailed information and in-depth analysis will be needed with more involvement from line ministries.
- The preliminary study of budget expenditures for 2017-2019 shows that it is often difficult to identify how the relevant expenditures in 2019 were presented in budget documents of previous years, hence the changes in budget expenditure classifications, and substantive revisions of budget programs and measures, can be a significant constraint for database development, expenditure tracking and comparison for the last three years. This will complicate expenditure analysis, comparison, and require more in-depth research and additional information.

- Another limitation of the assignment can be the scattered nature of the information or the varying quality of data provided by the ministries.
- The majority of the development partners' longstanding practice of not using the treasury or PFM system for grants financing of CC programs by the government and allocating climate funds to NGOs or CSOs directly prevents full integration. This will create complications for data collection and analysis for the donor financed projects.
- Lastly, a significant amount of time will be devoted to the data collection and the analysis of the information. This may be rather time-consuming, and in addition to the significant amount of work with line ministries, it may lead to the need to review the initial deadlines.

5. DEVELOPMENT OF CLIMATE BUDGET TAGGING MODEL FOR ARMENIA

The tracking of cross-cutting goals such as climate change adaptation and mitigation presents challenges to traditional budget management, which is typically structured around organizational, economic, and programmatic classifications. Traditional budget management does not normally allow for capturing spending on cross-cutting issues like climate change.

To overcome this issue, a model for Climate Budget Tagging (CBT) for Armenia will be developed. CBT is a tool for identifying, classifying, weighing and marking climate-relevant expenditures in a government's budget system, enabling estimation, monitoring, and tracking of those cross-cutting expenditures.

Although CBT is used by a growing number of countries to identify and routinely measure climate relevant expenditure within the existing budget system, it should be noted that there is no universal methodology for CBT and both developing and developed countries struggle with this challenge.

The model will be based on the results of the CPEIR and the following aspects will be carefully considered while designing the CBT model:

- Level of accuracy of the tag;
- Coverage;
- Criteria and weights applied;
- GFMIS linkage;
- Object of tagging;
- Responsibility for weight assignment.

The more accurately the CC expenditures are assessed and tagged, the more reliable and useful the generated information will be. However, in cases of cross-cutting policies, such as climate change, the precise assignment of weights of expenditures is often a very costly and sometimes even impossible process. The method of identification, assessment, and weighting of CC related expenditures implemented for CPEIR further will be used as a basis for CBT design.

Based on the CPEIR results a typology of CC expenditures for Armenia will be developed, which later will be used as guidance for the CBT process. The purpose of creating a typology is to enable the analysis of the composition of CC expenditures. The attempt will be done to make the typology related to the national climate policy and action plan, which will create 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. A typology also will ensure the consistency of multi-year comparisons that administrative classification does not, given that ministries and public agencies may undergo restructuring over time. At a minimum, the typology will enable differentiation between mitigation and adaptation activities, and to the extent possible, the sources of funding.

Another important aspect of the CBT process is the coverage. The more attributes of CC expenditures are included in the CBT matrix, the more informative the CBT system will be. However, each extra attribute will require a new classification of data in the CBT system, consequently complicating the coding structure. This can turn as a significant limitation for CBT automation and integration in FMIS systems. Therefore, the optimal scope of attributes for budget tagging of CC expenditures (e.g. mitigation/adaptation, etc.) will be proposed.

Different options for automation of the CBT process will be considered, including the possibility of extending the current chart of accounts embedded in FMIS with extra codes for CC expenditure tagging. As an alternative, the options of manual tagging and operating a separate software for CBT (off-database) will also be considered.

The application of the CBT model at different stages of the budget process (budget planning, execution, and reporting) will be considered, and relevant recommendations will be presented on the methods and tools to incorporate CBT into the budget cycle and information systems. In particular, recommendations may include, but not be limited to the followings:

- Draft changes in MTEF instructions to present CC expenditures;

- Recommendations on coding or another tagging tool to present CC expenditures in budget information systems (databases);
- Recommendations of reporting formats to be generated by budget information systems as part of various stages of the budget cycle;
- Finalized guidelines how to conduct CC expenditure tagging;

The CBT model will be designed in close cooperation with all stakeholders, especially with the MoF and MoE. Before finalizing the initial version of the model will be presented to main stakeholders for consideration and will be finalized based on their comments and suggestions.

6. ANNEXES

6.1. Annex 1. Mapping of Governmental Stakeholders

	Stakeholder Name	Area of Relevance to the Assignment	Impact How much does the Assignment may impact them? (Low, Medium, High)	Influence How much influence do they have on the Assignment? (Low, Medium, High)	How could the stakeholder contribute to the Assignment?	How could the stakeholder block/hamper the Assignment?	Primary Mode for Engaging the Stakeholder
1	Ministry of Finance	▪ PFM methodology ▪ Budget process (planning, execution, reporting)	High	High	▪ Information ▪ Expertise ▪ Involvement	Resistance in communications and data provision	▪ Working meetings/ communications ▪ Formal workshop(s)
2	Ministry of Environment	▪ CC mitigation and adaptation policy ▪ Environmental protection ▪ Forestry ▪ Hydrometeorology ▪ Biodiversity and conservation	High	High	▪ Information ▪ Expertise ▪ Involvement	Resistance in communications and data provision	▪ Working meetings/ communications ▪ Formal workshop(s)
3	Ministry of Economy	▪ Agriculture ▪ Food security ▪ Industry ▪ Tourism ▪ Public investment management and prioritization	High	High	▪ Information ▪ Expertise ▪ Involvement	Resistance in communications and data provision	▪ Working meetings/ communications ▪ Formal workshop(s)
4	Ministry of Territorial Administration and Infrastructures	▪ Energy ▪ Transport ▪ Water and wastewater ▪ Urban development ▪ Solid waste management	High	High	▪ Information ▪ Expertise ▪ Involvement	Resistance in communications and data provision	▪ Working meetings/ communications ▪ Formal workshop(s)
5	Ministry of Emergency Situations	▪ Disaster and disaster risk management	Medium	Medium	▪ Information ▪ Expertise ▪ Involvement	Resistance in communications and data provision	▪ Working meetings/ communications ▪ Formal workshop(s)
6	Ministry of Education, Science, Culture and Sport	▪ Education	Medium	Medium	▪ Information ▪ Expertise ▪ Involvement	Resistance in communications and data provision	▪ Working meetings/ communications ▪ Formal workshop(s)
7	Ministry of Health	▪ Public health	Medium	Medium	▪ Information ▪ Expertise ▪ Involvement	Resistance in communications and data provision	▪ Working meetings/ communications ▪ Formal workshop(s)
8	Yerevan Municipality	▪ CC related state budget expenditures in Yerevan City financed from the state budget (MoTAI) and executed by the YM	Medium	Medium	▪ Information ▪ Expertise ▪ Involvement	Resistance in communications and data provision	▪ Working meetings/ communications ▪ Formal workshop(s)

6.2. Annex 2. Standard OECD DAC Criteria for Climate Change Expenditures

MITIGATION

OECD Definition: An activity should be classified as climate change mitigation related if it contributes to the objectives of stabilisation of greenhouse gas (GHG) concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system by promoting efforts to reduce or limit GHG emissions or to enhance GHG sequestration	
Sector	**Example activities**
Forestry	Protection and enhancement of sinks and reservoirs of GHGs through sustainable forest management, afforestation and reforestation
Water and sanitation	Methane emission reductions through waste management or sewage treatment
Energy	GHG emission reductions or stabilization in the energy, transport, industry and agricultural sectors through application of new and renewable forms of energy, measures to improve the energy efficiency of existing machinery or demand side management (e.g. education and training)
Transport	
Industry	
Agriculture	

ADAPTATION

OECD Definition: An activity should be classified as adaptation-related if it intends to reduce the vulnerability of human or natural systems to the impacts of climate change and climate-related risks, by maintaining or increasing adaptive capacity and resilience (OECD, 2011)	
Sector	**Example activities**
Enabling activities	Supporting the development of climate change adaptation-specific policies, programmes and plans
Policy and legislation	Capacity strengthening of national institutions responsible for adaptation
Agriculture	Promoting diversified agricultural production to reduce climate risk
Energy	Strengthening of energy transmission and distribution infrastructure to cope with the expected impacts of climate change
Forestry	Securing local rights and systems for the sustainable and long-term utilization of the forest in order to increase resilience to climate change
Health	Strengthening food safety regulations; developing or enhancing monitoring systems
Transport	Building protection from climate hazards into existing transport infrastructures (e.g. Disaster Risk Reduction measures)
Water and sanitation	Monitoring and management of hydrological and meteorological data

Source: Handbook on OECD-DAC Climate Markers (OECD, 2011)

6.3. Annex 3. CCBII Measurement Methodology

Category/ Subcategory	Query	Grading	Means of Verification	Points
P1. Policy and Strategic Planning Context for CC				**10**
P1.a. Existence of a specific high-level policy on CC	Is there a high-level multi-year (covering more than 5 future years) policy document[3] on climate change in the country?	1: Yes and it is finalized within last 60 months 0: No or it is older than 60 months	Reference to the document	1
P1.b. Level of endorsement of the CC policy/ies	What is the status and level of endorsement of relevant CC policies that may drive CC finance planning?	2: CC policy is endorsed by the high level of the Executive and/or the Legislature 1: CC policy is endorsed by a political actor (e.g. level of minister or equivalent) 0: CC policy is not endorsed or endorsed at a non-political level	Reference to the document	2
P1.c. Existence of specific policy targets and costing that can be linked with budgets	Are there SMART and financially estimated policy targets available in the policy documents (including in other sector policies) to enable budget framework to make performance-informed budget decisions?	3: clear policy targets with indicators and cost estimates by years and individual programmes (areas of expenditures) exist for more than 75% (by expenditure size) of CC relevant initiatives 2: clear policy targets with indicators and cost estimates for at least next fiscal year and individual programmes (areas of expenditures) exist for at least 50% (by expenditure size) of CC relevant initiatives 1: some policy targets with measurable indicators exist but are not cost and/or difficult to directly align with budget programmes/lines 0: policy does not contain measurable targets and costs or no relevant policy is available for assessment	Reference to the specific sections of the relevant document	3
P1.d. Reflection of CC policies in strategic budget documents	Do strategic budget documents (MTEF or other budget documents that present expenditure strategies and that are legally required as part of the annual budget cycle) explicitly reflect on CC policies?	4: A Climate Change Financing Framework or a designated section (chapter or annex) on CC policies and finances for particular period with closely linked allocations and expected performance exists in the strategic budget documents (MTEF). 3: Strategic budget documents contain policy references to CC policy documents and financial data explicitly linked to such policies are available for at least 50% (in monetary terms) of CC related expenditure plans. 2: Strategic budget documents contain policy references to CC policy documents but financial data is not explicitly linked (or difficult to show such linkage) 1: Government endorsed (or ministry of finance) documents are available that contain policy references to CC policy documents with financial data available and explicitly linked with policy targets. However, those documents are not annually updated AND are not part of the formal budget cycle (no legal requirements on such documents exists for government to publish on annual basis) 0: Strategic budget documents (MTEF, Budget Messages or equivalents) do not contain explicit reference or policy goals from relevant CC policy documents or no relevant document is available for assessment	Reference to the specific sections of the relevant document	4

Category/ Subcategory	Query	Grading	Means of Verification	Points
P2. Requirements: Legislative and other procedural requirements on CC dimension for PFM				**10**
P2.a. Legislative or procedural requirements on CC finance presentation in budgets	Are there specific legislative or procedural requirements on CC budget formulation?	2: requirements on CC finance to be explicitly recognized in the budgets exist in the legislation (laws) 1: requirements on CC finance to be explicitly recognized in the budgets exist in government and/or ministerial procedures (business processes) 0: no legislative or other procedural requirement on CC finance exists in the country	Relevant legal acts or documents	2
P2.b. Budget guidelines/ instructions	Are there specific requirements on CC budget formulation in the budget guidelines?	2: Specific guidelines for CC expenditure planning with processes, institutional responsibilities, functions and templates to be used is explicitly presented in the budget guidelines 1: Budget guidelines (or equivalent) specify the importance of cross- sector budget planning (e.g. on poverty, gender, climate change) but do not specify the processes, institutional responsibilities, functions and templates to be used 0: No specific guidelines on any cross-sector expenditure planning/budgeting exist	Budget guidelines/ instructions	2
P2.c. Institutional scope of the requirements on CC finance	What is the institutional coverage of the requirements on CC finance during the strategic planning and budget planning stages budget formulation process?	3: Requirements cover all central and subnational governments government units (all public finance) 2: Requirements cover all central government units 1: Requirements relate only to the budget allocations for the main climate change relevant sector ministry (unit) 0: no specific requirement on CC finance exists in the country	Relevant documents on budget formulation process, budget calendar or functions	3
P2.d. Nature of the information required	What type of information is required?	3: Climate change impact assessment, key performance indicators (KPI), budget estimates linked with performance are required for climate change related initiatives 2: General climate change impact assessment (or similar) is required to be presented during budget formulation processes for climate change related initiatives but no specific requirements exist on costing and performance measurement 1: information is required to be presented during budget formulation processes for climate change related initiatives but no specific templates, processes and data requirements exist 0: no legislative or other procedural requirement on CC finance exists in the country	Relevant documents on budget formulation process, budget calendar or functions	3
P3. Priorities: Climate Change as a Priority in the budget system				**10**
P3.a.Programme/Project appraisal systems	Do the Programme/Project appraisal systems include CC dimension during MTEF/budget formulation stage?	3: Programme/project appraisal documents present climate change related assessments in the budget formulation documents with specific measurement of the CC impact and costing information 2: Programme/project appraisal documents present climate change related assessments in the budget formulation documents with specific measurement of the CC impact but no costing information 1: Programme/project appraisal documents present climate change related assessments in the budget formulation documents with no specific measurement of the CC impact and no costing information 0: The budget formulation process does not have a distinct climate change dimension (e.g. CC Impact Assessment) in programme/project appraisal documents	MTEF/budget submissions for new initiatives (programmes and/or projects)	3

Category/ Subcategory	Query	Grading	Means of Verification	Points
P3.b. Prioritization factors on CC	Is there a clear prioritization factor for the climate change allocations during the budget formulation process?	3: Climate change expenditures (programme/project) are recognized as a priority with a weight above the average weights for other sectors 2: Climate change expenditures (programme/project) have a specific weight in the prioritization system, but the weight is not significant (less than or equal to the average weight for other categories) 1: Climate change finance is separately mentioned as a priority for budget decision making but no specific criteria/weights for priority setting is available 0: System of expenditure (programme/project) exists but climate change does not have a distinct credence/weight and no reference to climate change as a priority sector exists 0: No system of programme/project prioritization exists as part of the MTEF/budget decision making process and no reference to climate change as a priority sector exists	Budget Guidelines or other relevant documents on budget formulation process	3
P3.c. Institutional prioritization of the climate	Is there an institutional solution with clear responsibilities on budget formulation coordination for climate change allocations?	2: a cross-sector and/or cross-ministry institutional solution is operational to coordinate the most of the climate change related budget formulation processes. 1: A specific institutional cell/unit/agency/ministry on climate change budgeting is operational but no cross-sector and/or cross-ministry budget coordination is explicitly established 0: no specific institutional solution exists for the climate change finances	Relevant document on institutional arrange-ment or organizational functions for the budget formulation	2
P3.d. Adherence to ceilings	Are climate change related expenditures treated as less priority than other expenditures?	$\frac{SDcc}{SDall}$ 2: if ≤ 1.0 1: if 1.0 < $\frac{SDcc}{SDall}$ < 1.5 0: if ≥ 1.5 or in case no relevant data is available for calculation *, where* *SDcc - the standard deviation of the % variance in actual budget expenditures for climate change related budget lines at the appropriation level (programmes, projects, heads) vs. the MTEF/budget ceilings approved for the same appropriations* *SDall - the standard deviation of the % variance in actual budget expenditures for all budget lines at the appropriation level (programmes, projects, heads) vs. the MTEF/budget ceilings approved for the same appropriations* *Note: approved budget allocations can be used instead of the actual expenditures in case no data is available on the latter for CC relevant appropriations*	In-house calculations (narrative on the applied methodology must be supplied)	2
S1. Reporting: Climate Change Expenditure Reporting				**10**
S1.a. Status of reports on CC expenditures	What is the status of endorsement of CC expenditures reporting?	2: Reports on climate change expenditures exist and are officially endorsed by the government and/or the Ministry of Finance 1: Reports on climate change expenditures exist but are not officially endorsed by the government and/or the Ministry of Finance 0: No specific reporting on climate change expenditures exists	Reports on CC expenditures	2

Category/ Subcategory	Query	Grading	Means of Verification	Points
S1.b. Nature of the CC budget expenditure reporting system	Is there a regular system of consolidated budget reporting on climate change expenditures?	4: Consolidated regular reports on CC expenditures exist as part of the budget reporting system 3: Consolidated reports on CC expenditures exist and are regular but are separate from the budget reporting system 2: Consolidated reports on CC expenditures exist but are not regular (e.g. CPEIR) 1: CC reports exists but are not consolidated and are not regular (at least, annual) 0: no specific reporting on climate change expenditures exists	Reports on CC expenditures	4
S1.c. Validation of the reports on CC expenditures by the SAI	Does the external auditor (SAI) validate the expenditure reports on climate change?	4: SAI validates the accuracy of a consolidated report on CC expenditures and performance auditing is applied with the audit of economy, efficiency and effectiveness (as per the INTOSAI's Auditing Standards) 3: SAI validates the accuracy of a consolidated report on CC expenditures and analysis of performance of selected expenditure items is presented 2: SAI validates the accuracy of a consolidated report on CC expenditures and only financial audit is applied 1: no consolidated reports on climate change expenditures exist but SAI validates the accuracy of the CC expenditures as part of the other expenditure reports 0: SAI does not validate the accuracy of the CC expenditures in any form	SAI reports	4
S2. Coding: CC budget coding (FMIS)				**10**
S2.a. Application of CC coding on budget allocations	Is there a budget tagging (marking, coding) applied during CC budget formulation process?	4: integrated data management systems (FMIS) are in place to track CC allocations (distinct climate change coding/classification as part of the budget database) 3: systemic computerized process of CC tagging for budget allocations is in place that allows multi-year comparability 2: provisional computerized process of CC tagging for budget allocations is in place with limited functionality (is not applicable for multi-year comparisons) 1: manual process of CC tagging for budget allocations is in place 0: no CC tagging is available for budget allocations	CC tagging system review	4
S2.b. Application of CC coding on budget actual expenditures	Is there a budget tagging (marking, coding) applied on CC expenditures?	4: integrated data management systems (FMIS) are in place to track CC allocations (distinct climate change coding/classification as part of the budget database) 3: systemic computerized process of CC tagging for actual expenditures is in place that allows multi-year comparability 2: provisional computerized process of CC tagging for actual expenditures is in place with limited functionality (is not applicable for multi-year comparisons) 1: manual process of CC tagging for actual expenditures is in place 0: no CC tagging is available for actual expenditures	CC tagging system review	4
S2.c. Availability and timeliness of the CC information	Is and when the information on CC budget allocations published?	2: Information on CC allocations is published and CC tagging for budget allocations is in place for budget decision making purposes (before the budget decisions on ceilings and allocations are made) 1: Information on CC allocations is published and CC tagging for budget allocations is in place for information purposes (after the decisions on budget ceilings and allocations are made) 0: no CC tagging is available for budget allocations	Relevant sections of budget documentation on CC allocations	2

Category/ Subcategory	Query	Grading	Means of Verification	Points
S3. Calculation: Methodology on calculating CC finance				**10**
S3.a. Status of the CC finance calculation methodology	Is there a formally adopted methodology on climate change finance accounting? *Note: formal reference to an external methodology can also be considered as part of this assessment*	2: methodology on what is considered as CC finance exists and is approved by the MOF or other government stakeholder 1: methodology on what is considered as CC finance exists but is not formally approved by any of the key stakeholders 0: no CC finance accounting methodology	Relevant documentation on CC finance methodology	2
S3.b. Accuracy of accounting CC finances	What is the level of preciseness when calculating the climate relevance of the budget allocations?	4: Allocations are recognized CC relevant using the "Benefits" approach (i.e. only marginal costs of budget programmes that directly reflect the expected climate change related response are considered as CC relevant) 3: Climate relevance uses exact amounts within programmes, projects and other budget lines (budget heads) that are recognized as climate relevant (precise or rounding rule of not more than 10 per cent points) 2: Climate relevance uses ranges (percentage blocks of the relevance) 1: Climate relevance is binary (yes/no; assigning 100% of the allocation as climate change relevant if "yes" and 0% if "no") 0: no CC finance accounting methodology	Relevant documentation on CC finance methodology	4
S3.c. Criteria	Is the CC relevance determined using a set of criteria?	1: CC relevance is determined using an adopted set of criteria 0: no CC finance accounting methodology or CC relevance is subjective (no criteria set)	Relevant documentation on CC finance methodology	1
S3.d. Scope	What type of CC activities are covered by the CC finance methodology?	2: covers both CC mitigation and adaptation 1: covers only CC mitigation or CC adaptation 0: no CC finance accounting methodology	Relevant documentation on CC finance methodology	2
S3.e. Comparability	Does the methodology allow cross-period comparability?	1: Applied methodology allows cross-period (historical) comparability 0: no CC finance accounting methodology or the existing methodology does not allow cross-period (historical) comparability	Relevant documentation on CC finance methodology	1
A1. Performance: CC performance information				**10**
A1.a. Availability of CC performance information	Is performance information on climate change related budget allocations available in budget documentation (budget law, budget speeches, MTEF, budget execution reports, etc.)?	4: performance information on CC budget allocations is extensively available in the budget documents (for more than 50% of CC relevant budget allocations) 3: some performance information on CC budget allocations exists and is part of the budget documentation but is fragmented in its application (covers less than 50% of CC relevant budget allocations) 2: performance information on CC budget allocations exists but is limited to internal budget documentation (budget submissions to MOF, line ministry internal documents, etc.) 1: performance information on CC budget allocations exists but outside of budget documents (standalone reports, planning documents, etc.) 0: no specific information on expected performance (outcomes, outputs) of climate change related budget allocations is available	Relevant budget document	4

Category/ Subcategory	Query	Grading	Means of Verification	Points
A1.b. SMART-ness of indicators	Do the performance indicators meet the SMART[4] criteria?	3: Performance indicators are available and fully or almost fully meet all criteria of SMART indicators 2: Performance indicators are available and majority of them meet the all criteria of SMART indicators 1: Performance indicators are available but mostly do not meet the basic criteria of SMART indicators 0: no performance indicators are used in the climate change budget formulation or reporting processes	Expert evaluation	3
A1.c. Performance information used during budget planning/costing	When (at what stages) in the budget cycle the performance information is used?	3: performance information is available to the budget decision makers to inform the decisions and also used in the budget execution (actual expenditure) reports with both planned and actual performance information presented 2: performance information is presented in the budget documents to the budget decision makers to inform the decisions (before the key budget decisions are made) 1: performance information is presented in the budget documents after the key budget decisions (including on multi-year ceilings) are made 0: no performance information is available in the budget documents	Expert evaluation based on interviews with budget planning officers (MOF, relevant line ministries/agencies)	3
A2. National Parliament: Parliament's engagement in the CC budget discussions				**10**
A2.a. Parliament committee on climate change	Is there a designated parliament committee on Climate Change?	2: a parliament committee on climate change exists with climate change mandate 1: no parliament committee on climate change exists but the mandate is mentioned as part of another committee (CC is not in the title of the committee but in sectors/topics/functions to be covered) 0: no parliament committee with clear mandate on climate change exists	Extract from the structure of the parliament	2
A2.b. The role of the parliament on CC dimension during budget scrutiny	What is the role of the parliament in draft budget scrutiny before the approval?	3: The parliament's relevant committee provides climate change expenditure analysis and report on compliance of the draft budget allocations with the climate change policies as inputs to the budget hearings 2: The parliament's relevant committee (on climate change or environment or equivalent) produces a brief on compliance of the draft budget allocations with the climate change policies 1: The parliament's relevant committee (on climate change or environment or equivalent) or the budget committee includes the reference to climate change allocations of the draft budget as part of the communication to the MPs, with no expenditure analysis or validation of relevance of the draft budget to the CC policies and policy targets 0: The parliament does not play any significant (distinct) role on climate change budget scrutiny	Interview or relevant documents	3
A2.c. CC finance effectiveness/ efficiency analysis	Does the parliament (or any of the parliament committees) perform a regular effectiveness and efficiency analysis of climate change finance?	3: Parliament (committees) has an operational Budget Office (or equivalent or outsources to professional institutions on a regular basis) with specific function on CC finance effectiveness/ efficiency analysis 2: Parliament has in-house analytical capacities (cells) that perform analysis on CC finance effectiveness/efficiency 1: Parliament (committees) use analysis of other stakeholders (relevant development partners, think-tanks, etc.) in preparation of CC relevant analytical documents	Organizational chart and/or relevant reports	3

Category/ Subcategory	Query	Grading	Means of Verification	Points
		0: no explicit CC finance effectiveness analysis is performed or commissioned by the parliament		
A2.d. CC finance accountability	What is the role of the parliament in holding the executive accountable for climate change expenditures?	2: The parliament receives report on climate change expenditure from the executive and organizes hearings on climate change expenditures 1: The parliament receives report on climate change expenditure from the executive (separately or as part of the overall budget reporting) but no hearings on climate change expenditures are organized 0: no budget hearings or other means of accountability specifically on climate change expenditures are practiced	Reference to documents or budget hearings	2
A3. CSO: CSO participation in CC finances				**10**
A3.a. Institutional partnership of CSOs with the government on CC finances	What is the institutional framework of CSO participation to CC finance?	3: There is a forum of CSOs on climate change aspects that is in partnership with the government 2: Individual CSOs are partnering with the government on CC finance and the partnership is documented 1: Some CSOs actively work in the area of CC finances but no evidence of regular cooperation on CSO dimension with (recognition by) the government 0: No evidence of CC specialized CSOs actively working on CC finance	Relevant report/documents, extracts from memorandums and/or interviews	3
A3.b. CSOs and the Budget preparation	What is the role of CSOs in climate change budget formulation?	4: CSOs are commissioned by the government agencies to provide climate change policy and/or budget recommendations to feed into the budget formulation process 3: Line ministries, planning institutions and/or MOF use the climate change expenditure related reports by CSOs and/or CSOs take part in budget discussions as part of the budget formulation process 2: CSOs publish climate change public finance relevant reports and analysis but use of those by the executive in budget formulation is not proven 1: CSOs produce climate change related papers, reviews and other analytical materials that can be used by the government during budget formulation processes. The documents, however, do not specifically analyse the climate change finance. 0: No evidence of CSOs directly or indirectly participating in climate change budget formulation	Relevant report/ documents and/or interviews	4
A3.c. CSOs and the Budget monitoring and reporting	What is the role of CSOs in climate change budget monitoring and reporting?	3: CSOs are commissioned/funded by the government stakeholders to perform climate change expenditure monitoring and reporting function 2: CSOs publish climate change expenditure monitoring reports as part of the government's monitoring and reporting process on the budget expenditures and/or CSO reports are published at government websites 1: CSOs publish climate change expenditure monitoring reports but the process is not proven to be connected with government's own monitoring and reporting process on the budget expenditures 0: CSOs do not directly participate in budget monitoring and reporting	Relevant report/documents and/or interviews	3

Category/ Subcategory	Query	Grading	Means of Verification	Points
D1. Donors: Integration of CC activities of Development Partners in the national PFM systems				**10**
D1.a. Procedural requirements on CC planning, budget execution and monitoring/reporting in country's domestic PFM system for donor related programmes/ projects	Is there a requirement to reflect DPs CC programmes and projects in national budget documents?	2: reflection of DPs' CC finance inn budget formulation process is a legal requirement and is also reflected in budget formulation requirements 1: budget formulation requirements (e.g budget guidelines) require DPs CC finances be reflected in MTEF/budget documents 0: no requirement in reflecting DP CC finances in MTEF/budget documents	Reference to relevant documents	2
D1.b DP's CC finance information systems	How much is DP's climate change finance integrated into national PFM information systems?	2: Information on DP's CC finance (programmes and projects) is part of the government's FMI system (GFMIS) and covers financial information from key DPs 1: Relevant line ministries have regular access to CC finance (programmes and projects) of major DP to feed into the budget formulation process but information is not then integrated into national PFM information systems 0: DPs do not supply directly or via line ministries to the national PFM authorities financial information on CC programmes/projects on regular/systemic basis	Interviews or extracts (screenshots) from relevant documents	2
D1.c. Presentation of DP's CC programmes (budgets) in budget documentation	Are the Development Partners' programmes and projects on climate change reflected in government's budget documents (not necessarily as part of the national budget but as part of the climate change overall context)?	2: information on actual and/or proposed programmes of DPs is published in budget documents (e.g. MTEF, budget speech, etc.) 1: information on actual and/or proposed programmes of DPs is reflected in budget formulation documents to feed the decision making process on domestic allocations (line ministries' internal budget formulation documents, MTEF/budget submissions to MOFs, etc.) 0: no solid evidence of such information presented in budget documents	Reference to relevant documents and processes	2
D1.d. % of CC funds channelled through national PFM systems	What is the % of CC funds channelled through national PFM systems	4: more than 50% of DP projects on CC are on-treasury 3: at least one DP project on CC is on-treasury and more than 50% of DP projects on CC are on-budget 2: at least one DP project on CC is on-treasury (executed as part of the national budget execution/treasury system) 1: at least one DP project on CC is on-budget (reflected in the budget) 0: no information is available on the level of use of national PFM systems by DPs for CC projects	Budgets and Budget execution reports	4