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Implementation of the Climate Budget Tagging methodology in Azerbaijan

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This report was prepared in the framework of the **EU4Climate project** which is funded by the European Union (EU) and implemented by the United Nations Development Programme (UNDP).

The contents of this report constitute recommendations on the implementation of the Climate Budget Tagging in Azerbaijan provided by the local expert in response to the request of the UNDP Country Office in Azerbaijan.

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Abbreviations and Acronyms

BIs	Budget Institutions
BSL	Budget System Law
CBT	Climate Budget Tagging
CC	Climate Change
CCFF	Climate Change Financing Framework
CCPB	Climate Change Planning Body
COFOG	Classification of Functions of Public Administration Bodies
CHIF	Compulsary Health Insurance Fund
CPEBR	Climate Public Expenditure and Budget Review
CPEIR	Climate Public Expenditures and Institutional Review
EU	European Union
GFSM	Government Financial Statistics Manual
HDI	Human Development Index
IMF	International Monetary Fund
MoA	Ministry of Agriculture
MoE	Ministry of Economy
MoENR	Ministry of Ecology and Natural Resources
MoEdu	Ministry of Education
MoF	Ministry of Finance
MoP	Ministry of Planning
MTEF	Medium-Term Expenditure Framework
NDA	National Designated Authority
ND-GAIN	Notre Dame Global Adaptation Initiative
PFM	Public Finance Management
PPP	Pablic-Private Partnership
SDGs	Sustainable Development Goals
SOFAZ	State Oil Fund
SPF	State Social Protection Fund
SST	State Statistical Committee
UN	United Nations
UNDP	United Nations Development Program
UNFCCC	United Nations Framework Convention on Climate Change
UIF	Unemployment Insurance Fund

Executive Summary

Implementation of Climate Budget Tagging (CBT) has been defined as one of the medium-term fiscal policy priorities by the Ministry of Finance (MoF)[1]. It could help understanding how much government spends on Climate Change (CC) and making CC finance visible in budgets. CBT and expenditure tracking could be an important milestone in addressing Azerbaijan's climate-related policy ambitions and goals, as well as could be an effective leverage of financial resources available for that purpose.

This report was prepared in the framework of the **EU4Climate project** which is funded by the European Union (EU) and implemented by the United Nations Development Programme (UNDP) for the purpose of developing initial recommendations for the implementation CBT in Azerbaijan. The report focused on making proposals on the integration of climate objectives and dimensions into the budgeting process based on the applicable international experience.

Report finds that financing of the climate related measures is poorly integrated into budget processes in Azerbaijan. The current budget classification does not allow to determine how much money is allocated for measures to combat climate change. The lack of a separate item of expenditure on measures and activities for combating climate change in the current budget classification of Azerbaijan makes it difficult to record and analyze public expenditures in this area.

However, there are some new developments such as introduction of the Medium-Term Expenditure Framework (MTEF) and result-based budgeting in three pilot sectors (Education, Agriculture and Environmental Protection) which provides huge opportunities for the integration of CC Finance into the budget processes.

The country's climate and public financial management legal and institutional frameworks, practices and reforms review suggest that a phased introduction of CBT is both feasible and expedient. Feasibility is based on the solid institutional commitment spurred by a growing number of young technical cadre in the government, and availability of basic climate-disaggregated data. Expediency draws from the defining the application of CBT by the Ministry of Finance as one of the main directions of fiscal policy in the medium term, growing momentum in the roll-out of the MTEF, sustained commitment to move towards results-based budgeting, and the need to alleviate the adverse impacts of climate change.

The experience of the other countries shows that the application of CBT is more successful in countries with program-based budget planning. In this regard, the report suggests that the introduction of CBT in Azerbaijan should be integrated to the MTEF development process of the piloted sectors. It will make it easier to identify the relevance of programs and activities to climate change and make CBT easier to apply.

The proposed measures for introduction of CBT in Azerbaijan can be grouped in institutional, data and information management, and public financial management system dimensions:

[1] http://maliyye.gov.az/scripts/pdfjs/web/viewer.html?file=/uploads/news_files/5fe0996cc4b44.pdf

1. Institutional

- The MoENR could propose to the Cabinet of Ministers an establishment of the Climate Change Policy Body (CCPB) which will be responsible for integrated climate change governance including developing, monitoring and coordinating a national climate policy.
- The MoENR could initiate development of the National CC policy and National CC Implementation Strategy.
- The government agencies most pertinent to CBT implementation (MoF, MoENR, MoE, SSC) and other selected line ministries) assign an organic unit in their organization structure and staff to be responsible for CBT implementation.
- MoF could propose to the Cabinet of Ministers to set up a CBT technical working group to develop an action plan on mainstreaming CBT in the country's PFM system. This group could submit regular progress reports on the status of CBT introduction and seek support in addressing emerging issues.
- MoF and MoENR, with possible support of development partners could prepare methodological guidelines on CBT and submit it to the Cabinet of Ministers for adoption.
- MoF and MoENR, with possible support of development partners, facilitate delivery of CBT awareness raising and capacity building for climate change and CBT focal points and related staff in the government agencies, Parliament, Chamber of Accounts, and local administrations.
- MoF could discuss progress with CBT implementation in the annual budget execution report submitted to the Government and Parliament.

2. Statistics and information management

- MoE, MoENR and SSC could set up a system of collecting the missing quantitative climate indicators related to the Sustainable Development Goals.
- MoF, MoENR and SSC could set up a joint task force to develop proposals on the planning, collection, monitoring, and reporting of climate change related data on service delivery.
- MoF could integrate CBT process to the newly built Budget Management Information System.
- MoF could open CBT webpage on its website as repository of CBT related documents and information, with cross links to relevant sources at other government agencies' websites (e.g., MoENR and SSC). Over time, this webpage could be expanded to become a platform for knowledge sharing between different sector ministries and posting of regular e-newsletters on climate-change activities and reflect climate change related data on service delivery performance plans and actual delivery.

3. Public Finance Management System

- In order to bridge CC planning with regular budgeting processes CC Financing Framework should be integrated into the MTEF process, as well as into budget templates and guidelines (circulars). MTEF guidelines could contain climate related requirements to ensure the government agencies' medium-term budget proposals adequately reflect the climate dimensions. Through the letter of instruction and the annual budget request forms, the MoF could require the

government agencies to include climate change assessment and climate change related information in their revenue and spending proposals.

- MoF, could define CC criteria as an additional weight in expenditure prioritization process.
- MoE could amend the Rules for the State Investment Program (SIP) and the related forms issued to the government agencies to reflect climate dimensions of the proposed public investment projects.
- The draft law on budget submitted to Parliament could contain information about its climate relevance. Specifically, an explicit discussion of climate change impacts of the intended program and activities can be embedded in the MTEF.
- MoF would need to consider meaningful integration of CBT in the ongoing and planned PFM reforms, including those towards results-based budgeting.
- State Treasury Agency could review international experience on tracking budget expenditures for climate change and develop proposals on possible tracking of budget expenditures for CC within the current PFM system.
- MoF and MoENR could start (i) doing CC Climate Public Expenditure and Institutional Review (CPEIR) of the MTEF pilot sectors, and (ii) reflecting CC allocations or CC Citizen's Budget in the annual and quarterly budget execution reports submitted to the Parliament.
- The Chamber of Accounts, based on international experience, could start developing guidelines for ex-post evaluation of the agency performance of public service delivery with focus on CC finance.
- The Parliament could consider inviting MoENR to the budget hearings to inform on the state of climate change in the country and government´s ongoing and proposed activities to decrease negative effects of climate change.
- CC budget reporting and collaborative research on CC expenditures with CSOs should be applied in order to increase accountability for budget spending on CC.

Introduction

Azerbaijan, like other countries, has been negatively affected by climate change. According to the latest assessment of the Notre Dame Global Adaptation Initiative (ND-GAIN), Azerbaijan fell from 112th place in the world in 1995 to 73rd place in 2018 in terms of resilience to the effects of climate change. The low vulnerability score and high readiness score of Azerbaijan places it in the lower-right quadrant of the ND-GAIN Matrix. According to the report, adaptation challenges still exist, but Azerbaijan is well positioned to adapt. Azerbaijan is the 77th least vulnerable country and the 93rd most ready country[2].

Key climate risks include floods, increasing annual average temperature, rise in sea level, growing water deficit, air pollution, land degradation. Main climate change vulnerable sectors in the country are agriculture, human health, water resources, forestry, tourism.

The whole world is worried about the climate change and its consequences. The global nature of the problem requires concerted efforts to reduce the negative effects of climate change and to take adaptation measures, as well as to strengthen international cooperation in this area. In this regard, the Republic of Azerbaijan has joined a number of key international agreements and initiatives currently in force at the global level to combat climate change. As a contribution to global climate change prevention initiatives, Azerbaijan aims at a 35% reduction in greenhouse gas emissions by 2030 as compared to the 1990 base year.

Taking urgent action to combat climate change and its effects has been identified as one of the Sustainable Development Goals (SDGs) adopted by world leaders at the 2015 UN historic summit. One of the targets is to meet the needs of developing countries for substantial measures to mitigate climate change and implement transparency, as well as fulfillment of the commitment of the developed countries which are parties to the Framework Convention on Fundraising to raise a total of $ 100.0 billion annually from all sources by 2020 in order to ensure the full operation of the Green Climate Fund through capitalization as soon as possible.

Activities to combat climate change require significant financial resources. Therefore, climate change financing, the attraction and efficient use of financial resources to mitigation activities are among the most important issues for all countries, especially for developing countries.

The measures taken to combat climate change in Azerbaijan were mainly funded from the state budget. Financing of the climate related measures is poorly integrated into budget processes. At present, the preparation and execution of the state budget in Azerbaijan is carried on the basis of the unified budget classification which is in comliance with the International Monetary Fund's (IMF) Government Financial Statistics Manual - 2014 (GFSM 2014). The current functional classification of budget expenditures has been improved in accordance with the UN Classification of Functions of Public Administration Bodies (COFOG).

[2] https://gain.nd.edu/our-work/country-index/

Since adaptation and mitigation measures cover many sectors, from agriculture and environmental protection to health, so it is almost impossible to combine these costs into a single expenditure item in the GFS and COFOG systems. The lack of a separate item of expenditure on measures and activities for combating climate change in the current budget classification of Azerbaijan makes it difficult to record and analyze public expenditures in this area.

Thus, the current budget classification does not allow to determine how much money is allocated for measures to combat climate change. Therefore, in order to understand how much government spends on CC and to make CC finance visible in budgets, CBT should be implemented.

The purpose of this report is to develop initial recommendations for the integration of climate objectives into the budgeting process and for the implementation CBT in Azerbaijan based on the applicable international experience.

1. Methodological Approach

1.1. Analytical framework

Chapter 2 of the report focuses on the definition of the CBT methodology and the best practices of its implementation by reviewing the international experience.

Experience with the implementation of CBT in different countries has shown that several general conditions contribute to its success. **Chapter 3** analyses the extent to which the following enabling factors exist in Azerbaijan:

- Government commitment to promote climate action (e.g., existence of National Climate Strategy with a strong mandate to advocate for climate change activities, or availability of a national climate policy and a costed action plan for its implementation);
- Conducive legal and policy framework to institutionalize CBT, and existence of inter-sectoral coordination mechanisms among government organizations working on climate public finance;
- Availability of climate change statistics, time use data, and climate-sensitive M&E systems;
- Ongoing public finance management reforms, especially the introduction of program-based budgeting, and ongoing public procurement reforms;
- Existence of interested stakeholders outside government (e.g. parliamentarians, civil society) and commitment of development partners to support CBT in the medium to long-term;

The above factors measure how conducive the overall political, legal and institutional environment for implementing CBT in a country is. Chapter 3 also reviews the current public finance management (PFM) system and the state of the climate finance, including current budget process and the existing design and capacity of the budget information system. Morever, Chapter 3 focuses on the assessment of the overall enabling environment using the strengths, weaknesses, opportunities, and threats (SWOT) approach.

Chapter 4 outlines key steps in setting of National CBT system.

The **concluding chapter** consolidates the main findings of the report and contains recommendations on future actions and interventions to integrate climate finance into budgeting process and to implement CBT in Azerbaijan.

1.2. Data collection methods

Data for this report was collected through in-depth review of existing reports and studies on the PFM system and climate in Azerbaijan; examination of the publicly available budget documents for climate change; complementary data obtained in interviews with key stakeholders during the preparation period.

2. Climate Budget Tagging – an International Perspective

2.1. Introduction to Climate Budget Tagging

Climate change and its consequences are disturbing the whole world. According to the latest data of the World Meteorological Organization, the first decade of the 21st century is the hottest decade according to all instrumental meteorological observations. According to the latest report of the Intergovernmental Panel on Climate Change, over the past 100 years, the average annual temperature on Earth has increased by 0.8°C, the world ocean level has risen by 15-25 cm and the ocean depth has reached to 3000 meters. Both intensity and frequency of typhoons and blizzards have increased. Hot winds, hurricanes and rainfalls have intensified. At the same time, there has been an increase in the number of deluges and floods.

The global nature of the problem necessitated the consolidation of efforts of mitigation and adaptation of the negative impacts of climate change and to strengthen international cooperation in this area. The adverse impact of climate change on human lives, environments, societies and economies, has made clear the need for concerted action at global and national level.

Specifically, on climate change, Governments have translated international commitments made under the United Nations Framework Convention on Climate Change (UNFCCC) into national policies and plans of action to mobilise efforts across different sectors to mitigate and adapt to climate change. To ensure their efficient and effective implementation, adequate resourcing and monitoring is required.

The urgent measures to combat climate change and its impacts were adopted by world leaders at the UN historical summit in 2015 and defined as one of the SDGs reflected in the 2030 Agenda for Sustainable Development, which came into force on January 1, 2016. One of the goals set for this purpose is to meet the needs of climate change mitigation and implementation transparency-based measures in developing countries, as well as the fulfillment of the obligation of the developed countries participating in the UNFCCC to collect 100.0 billion USD in total per year from all sources by 2020 to ensure the full functioning of the Green Climate Fund in the shortest possible time through capitalisation.

It is increasingly important to track and report financial flows that support climate change mitigation and adaptation, to build trust and accountability with regard to climate finance commitments and monitor trends and progress in climate-related investment.

Climate Budget Tagging (CBT) is a tool for identifying, classifying, weighting and marking climate-relevant expenditures in a government's budget system, enabling the estimation, monitoring and tracking of those expenditures. CBT is used by a growing number of countries to identify and routinely measure climate relevant expenditure within the existing budget system[3].

[3] Brain N., Nguyen L. Knowing what You Spend. A guidance note for governments to track climate finance in their budgets. UNDP

The tracking of cross-cutting goals such as climate change adaptation and mitigation present challenges to traditional budget management, which is typically structured around organisational, economic and programmatic classifications. Traditional budget management does not normally allow for capturing spending on cross-cutting issues like climate change. CBT has been designed to overcome this constraint, building on the experience from other thematic budget measurement tools, such as for gender, poverty reduction, or children – and also itself providing a platform and body of experience for developing other cross-cutting budget tools.

In particular, CBT may provide an entry point to support governments' efforts towards tracking resources for SDGs, bearing in mind that the cross-cutting goals of climate adaptation are linked to a number of SDGs. Firstly, CBT can help monitor the progress towards SDG 13 in particular ("Take urgent action to combat climate change and its impacts by regulating emissions and promoting developments in renewable energy"), as well as the climate change aspect that cuts across other SDGs such as SDG 7 (affordable and clean energy). Secondly, beyond its climate focus, CBT can serve as one component of a conceptual model for countries that consider introducing SDG budgeting or budget tracking.

More than an expenditure tracking tool, CBT has demonstrated a range of **benefits**:

Raising awareness and understanding of climate change, for example:

- **Helping to strengthen planning and budgeting in line ministries.** In Pakistan, the Ministry of Water has used the CBT information to integrate climate change in its Medium-Term Budgetary Framework. In Indonesia, the Ministry of Finance and the National Planning Agency encourage line ministries to use the climate expenditure data to strengthen their quantitative performance indicators.

- **Giving visibility to government climate change action both within the government, towards state accountability and oversight institutions, and among citizens.** In Nepal, the National Planning Commission and the Ministry of Environment and Forestry used the CBT data to raise awareness among line ministries of the scale of existing climate change action and motivate further action. To raise public awareness of government action CBT data was published as a dedicated "Citizens' Climate Budget" in Nepal and as part of Department of Budget's "People's Budget" in the Philippines. In Bangladesh, the government presents its annual climate budget report to the Parliament and has also issued its first Climate Citizen Budget with the Budget 2018-2019.

Mobilising resources for climate change, for example:

- **Providing evidence on government's existing spending as the basis for estimating the funding gap to inform government engagement with development partners and broader efforts to mobilise additional resources.** For example, the Ministry of Finance in Indonesia used the CBT data to show the gap between the existing public spending and the estimated cost

of the national climate mitigation action, and thereby the need to promote innovative financing and mobilise private finance. Subsequently, the MoF issued sovereign Green Sukuk (Islamic bond) designed to fund climate and biodiversity related programmes. With similar objectives to leverage additional, private financing, the MoF in Kenya is preparing to issue its sovereign Green Bond.

Improved monitoring and reporting of climate change policy and progress, for example:

- **Facilitating government reporting on international commitments,** such as Biennial Update Reports (BURs) on UNFCCC's Nationally Determined Contributions (NDCs), and progress towards the SDGs. For BURs, CBT provides expenditure data routinely collected by the existing financial management system to quantify both the existing spending and the need for additional financing for implementing NDCs.

2.2. CBT as a Part of Mainstraiming Climate Change in PFM

CBT is not a standalone initiative but part of a broader package of reforms that governments may use to help operationalize national climate change policies and action plans, incorporating consideration of climate change into public financial management.

A number of countries have undertaken a **Climate Expenditure and Institutional Review (CPEIR)** to take stock of their existing climate change structures and resources, and as a baseline for designing further reforms. A 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 definition of climate change related expenditures is tailored for each country based on a consultative process that takes into account its national priorities[4].

The CPEIR methodology has been developed from the public expenditure review methodology and has been elaborated by UNDP in its **2015 CPEIR Methodological Guide**. As set out in that guide, the CPEIR analytical framework has three key pillars: Policy Analysis, Institutional Analysis and Climate Public Expenditure Analysis.

Policy Analysis: A review of the climate change policy framework and its monitoring framework as well as how the policy objectives translate into programmes and instruments.

Institutional Analysis: An analysis of the roles and responsibilities of institutions and their capacities in formulating, implementing and coordinating climate responses. This pillar also includes the review

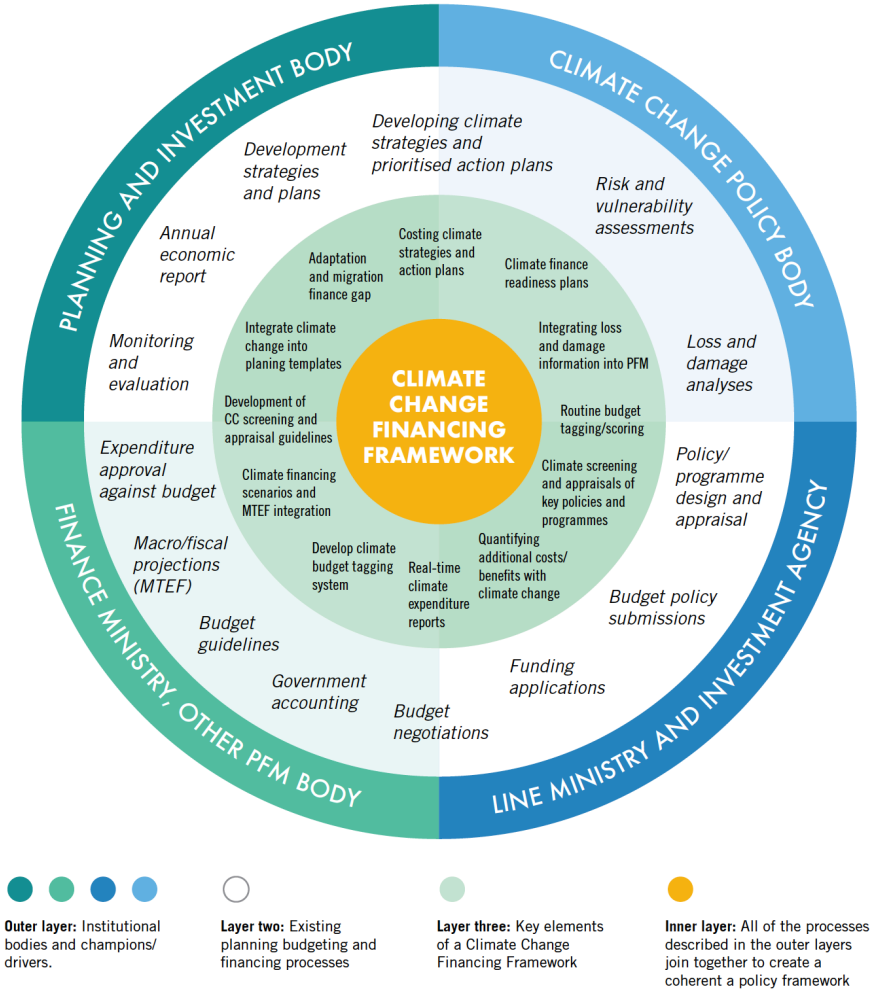
[4] UNDP 2015 CPEIR Methodological Guidebook. https://www.undp.org/content/dam/rbap/docs/Research%20&%20Publications/democratic_governance/RBAP-DG-2015-CPEIR-Methodological-Guidebook.pdf

of the budgetary and planning process and its linkages to financing climate change policies and programmes (adaptation and mitigation).

Climate Public Expenditure Analysis: This pillar quantifies the climate relevant expenditure out of the total national budget and measures fiscal policies, such as tax incentives and subsidies, as part of climate financing instruments.

In Kenya, a **Climate Public Expenditure and Budget Review (CPEBR)** was undertaken, broadly similar to the CPEIR approach. Through the CPEBR process, the role and place of the MoF in supporting climate change mainstreaming has grown significantly. The National Treasury now has become an important player in the climate change discourse, having been embedded in the Climate Change Act 2016, with a new National Climate Finance Policy 2018 having been adopted by Parliament, augmenting this position.

Figure 1. Components of CCFF Work[5].
Government Bodies and Processes that Constitute a CCFF



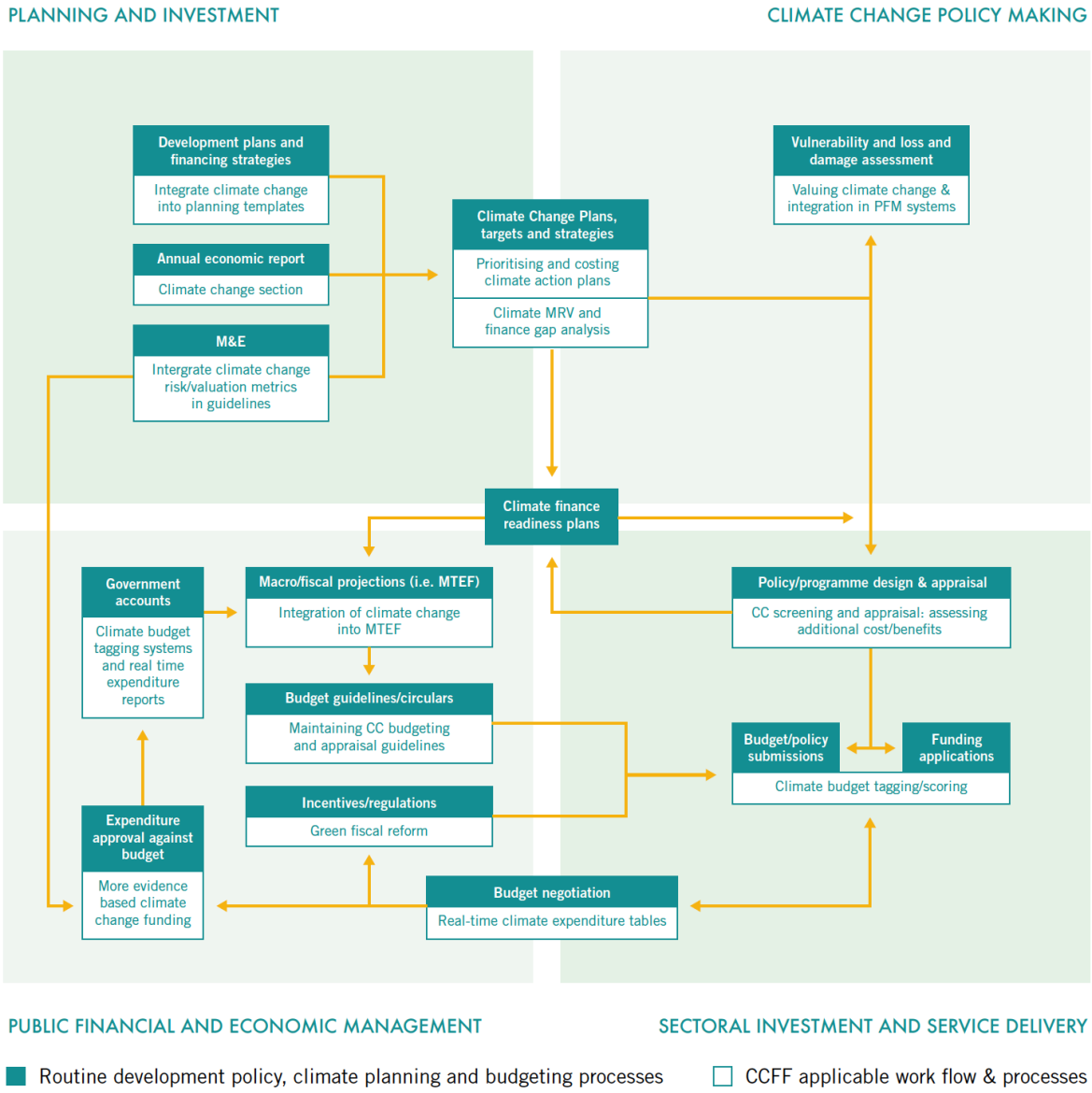
Note: the diagram above represents a stylised/suggested model and is not proscriptive. Different countries have different models according to their institutional arrangements.

[5] Hard Choices, Integrated Approaches: A guidance note on Climate Change Financing Frameworks; UNDP, 2018

As illustrated in Figure 1, CBT is one component of a **Climate Change Financing Framework (CCFF)**, which has the broader scope of bringing together the multi-sectoral climate relevant finance flows by: providing a comprehensive overview of domestic and international climate finance; linking climate change policies with planning and budgeting; prioritising climate actions; and developing appropriate modalities to manage climate financial flows in an effective and transparent manner[6]. To maximize the utility of CBT, the tool should link with other CCFF processes to incorporate climate change in planning and budgeting and be integrated in the existing PFM system.

Figure 1 illustrates the components of CCFF work including, as "layer 3" of that diagram, the key elements of a CCFF. The relationship between those components and how they relate to routine planning and budgeting activities is described in Figure 2.

Figure 2. Workflow within CCFF



[6] UNDP. 2015. Climate Budget Tagging Report: Country-driven initiative in tracking climate expenditure.

Table 1. Overview of some developing countries implementing CBT

	Bangladesh	Ghana	Indonesia	Kenya	Nepal	Pakistan	Philippines
GDP per capita (2018, current US$)[7]	1698.2	2202.3	3893.6	1710.5	1033.9	1482.4	3102.7
Population (2018, million)[8]	166	30	267	51	30	201	107
Climate risk index ranking[9]	13th (6th for long-term risk)	101st	70th	45th	14th	40th (7th for long-term risk)	16th (5th for long-term risk)
Main climate change risks	Rising sea levels, cyclones, storms, tidal surges	Droughts, rising sea levels	Rising sea levels, droughts, floods, forest fires	Droughts and floods, Rising sea level (on the coastal strip).	Glacier lakes outburst floods, melting of snow reserves, extreme weather events	Extreme climate-induced events (floods)	sea level rise, increased frequency of extreme weather events, rising temperatures and extreme rainfall[10]
Main climate policy framework	Bangladesh Climate Change Strategy and Action Plan (2009), CIP-EFCC (2017), Delta Plan 2100 (2018), Roadmap for Implementation of NDC	National Climate Change Policy (2014), Ghana National Climate Change Master Plan, Action Programmes for Implementation (2015-2020)	2011 National Action Plan on Climate Change Mitigation (RAN-GRK); 2014 National Action Plan for Climate Change Adaptation (RAN-API)	2010 National Climate Change Response Strategy; 2nd National Climate Change Action Plan 2018-2022; Climate Change Act 2016; NDC 2017; draft Climate Finance Policy 2018; National Adaptation Plan 2015-2030	2011 Climate Change Policy	National Climate Change Policy (2012) Pakistan Climate Change Act 2017. Framework for implementation of climate change policy (2014-30). National Climate Change Financing Framework (2017)	2009 Climate Change Act (updated 2012) National Framework Strategy on Climate Change 2010-2022 National Climate Change Action Plan 2011-2028

[7] World Bank, World Development Indicators.
[8] UNFPA website – world population dashboard
[9] German Watch 2018 Global Climate Risk Index. The annually published Global Climate Risk Index analyses to what extent countries have been affected by the impacts of weather-related loss events (storms, floods, heat waves etc.).
[10] https://www.climatelinks.org/resources/climate-change-risk-profile-philippines

	Bangladesh	Ghana	Indonesia	Kenya	Nepal	Pakistan	Philippines
Climate budget share in the total budget[11]	4% (2018-2019)	2% (2014)	3.9% (mitigation only)	8%	30.76% (2017/18)	8.4% (2015/16)	7.3% (2018)
Year CBT introduced	2017 (also used in 2012 in CPEIR study)	n/a	2016	Started in 2014 finalized in 2016	2013/14	2015/16	2013
Paris Agreement Ratification Status (in force 4 Nov 2016)	21 September 2016	21 September 2016	31 October 2016	28 December 2016	5 October 2016	10 November 2016	23 March 2017

[11] MoFs of the countries

3. Assessment of Enabling Environment

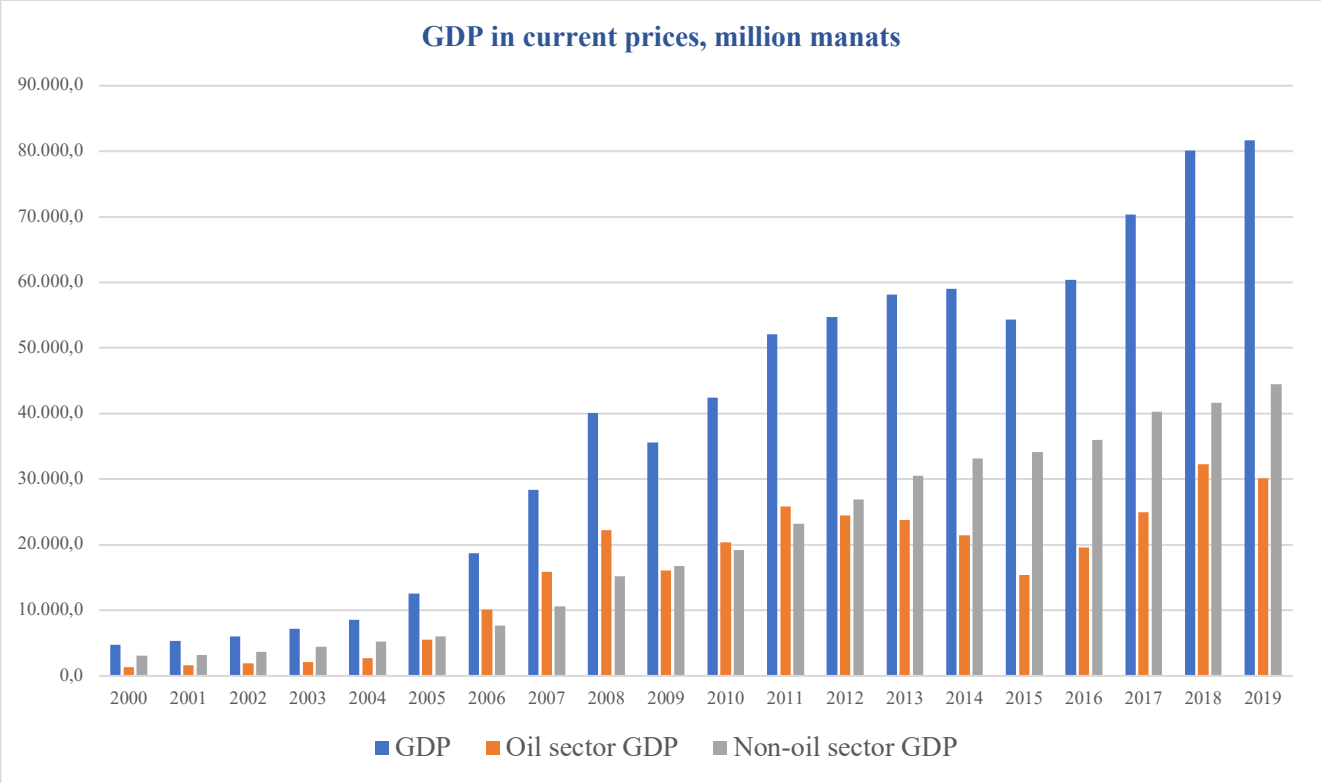
3.1. General Overview

Azerbaijan is an oil-exporting country located in the South Caucasus. The population is 10.1 million of which roughly 53% live in urban and 47% in rural areas[12].

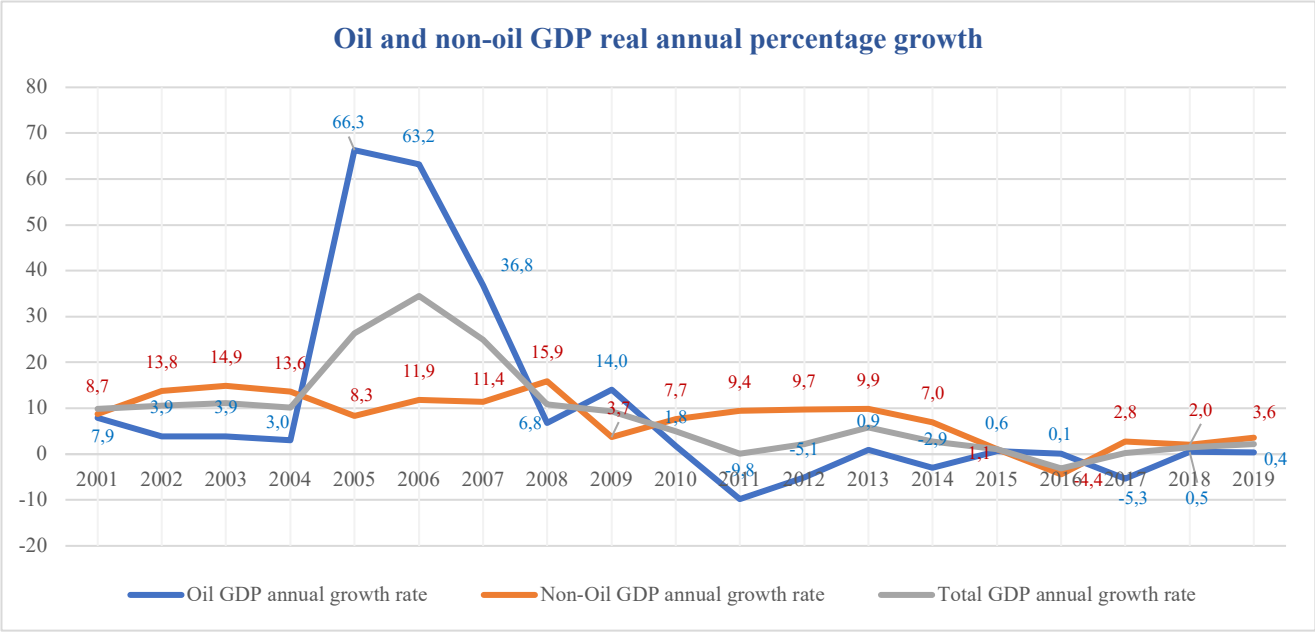
Azerbaijan restored its independence in 1991 following the collapse of the Soviet Union. Between 1995 and 2015, real GDP increased approximately six times growing at an average annual growth rate of 10%. Economic growth is largely synchronized with oil sector developments because the economy is heavily dependent on oil and gas sector. In 2019, the sector accounted for 38.3% of GDP, 91% of exports and 63% of consolidated government revenues[13].

The oil boom started in 2006 and Azerbaijan gained huge windfalls from oil export during 2006-2014. GDP per capita increased from US$ 310 in 1995 to US$ 7991 in 2014, before going down to $4851 in 2019 as a result of major local currency devaluations[14]. The volatility of Azerbaijan's economy is correlated with oil exports and oil prices (Figure 3.).

Figure 3. GDP growth dynamics



[12] The State Statistical Committee of the Republic of Azerbaijan, 2020, www.stat.gov.az
[13] The State Statistical Committee (www.stat.gov.az) and the Ministry of Finance of the Republic of Azerbaijan (www.maliyye.gov.az)
[14] The State Statistical Committee of the Republic of Azerbaijan, www.stat.gov.az



Source: The State Statistical Committee of the Republic of Azerbaijan, 2020, www.stat.gov.az

Non-oil GDP grew by 7.9% averagely in 2001-2019. Having benefitted from accumulation of oil wealth in the economy, non-tradable sectors (construction, vehicle repair, social and other services) expanded. Their growth rates were faster than agriculture and manufacturing. Oil wealth was transferred to non-tradable sectors of the economy via large public spending which led to the dependence of the non-oil private sector on public investment. As a result, private sector output in non-extractive industries is exposed significantly to volatility in the oil price and to fiscal policy variations.

In 2019, GDP was $48 bln., while non-oil sector accounted for 61.7%. Azerbaijan is an upper-middle income country with $4851 GDP per capita[15]. 36% of the population is employed in agriculture, forestry and fishing. Industry accounted 57.2%, agriculture 9.6%, transport 2.8% and IT services 2.7% of the GDP last year. CPI was equal to 2.6% in 2019[16].

Azerbaijan had continuously decreased poverty levels, which resulted in zero poverty (considering both $1.9 and $3.2 per day as poverty line) within seven years. While in 1998, 7.3% of Azerbaijanis live in poverty, by 2015, Azerbaijan managed to lift its entire nation from poverty. In 2019 5.0% of Azerbaijanis lived below the national poverty line.

Azerbaijan's Human Development Index (HDI) is 0.754, which places the country in the high human development category, positioned at 87 out of 189 countries[17].

[15] The State Statistical Committee of the Republic of Azerbaijan, 2020, www.stat.gov.az
[16] The State Statistical Committee of the Republic of Azerbaijan, 2020, www.stat.gov.az
[17] UNDP, Azerbaijan 2019 Human Development Report, 2020; and the State Statistical Committee SDGs, 2019

In 2019, the foreign trade turnover amounted to $33.3 bln, of which $19.6 bln. (59,0%) exports, and $13.7 bln. (41,0%) imports, resulting in a positive trade balance of $6 bln. Export is not diversified. 91% of the exports were accounted by oil sector[18].

The economy faced two major contractions, in 2009 due to the global financial crisis and in 2015 as a result of the dramatic fall in oil prices. Economic growth has remained subdued following the collapse of oil prices in 2015, coupled with relatively flat oil production and cuts in investment. Azerbaijan's economy has been slowly recovering since 2015 (Figure 3).

COVID-19, the sharp drop in oil prices and armed conflict against this background in 2020 have further weighed on growth and created new challenges for the Azerbaijani economy in 2020. These shocks are already taking a toll on the economy in the form of lower revenue, higher expenditures, pressure on the current account balance and national currency and low aggregate demand among other concerns. These macroeconomic effects were accompanied by a significant human cost, including loss of income, and a negative impact on the health and education of millions of people.

Azerbaijan is highly sensitive to the effects of climate change. Adverse effects of climate change manifest itself with an increase in the number of natural phenomena such as floods, deluges, droughts, heat stresses, etc.

The main expectations regarding climate change may include the rise of the air temperature to 1.4-2.8°C by 2050, the increase in the number of natural phenomena, especially floods, and the rise in the level of the Caspian Sea by 1.5-2 meters by 2050[19]. The results of various assessments show that the agricultural sector, water resources sector, coastal zones, energy sector, forest sector, tourism sector and health sector are the most vulnerable sectors to climate change in Azerbaijan. Azerbaijan is considered one of the most flood-affected areas in the world. Emergencies (mainly floods and landslides) damage Azerbaijan worth to about $ 70-80 million per year[20].

3.2. Legal and institutional framework

According to Article 39 of the Constitution of the Republic of Azerbaijan, everyone has the right to live in a healthy environment, and no one can threaten or harm the environment and natural resources beyond the limits established by law. According to the Constitution, the state guarantees the maintenance of ecological balance and protection of the legally established species of wild plants and animals.

[18] The State Statistical Committee of the Republic of Azerbaijan, www.stat.gov.az
[19] Climate change risk profile Azerbaijan. USAID Factsheet. https://www.climatelinks.org/sites/default/files/asset/document/2017_USAID_Climate%20Change%20Risk%20Profile_Azerbaijan.pdf
[20] Climate change risk profile Azerbaijan. USAID Factsheet. https://www.climatelinks.org/sites/default/files/asset/document/2017_USAID_Climate%20Change%20Risk%20Profile_Azerbaijan.pdf

Although there is no specific climate change strategy in Azerbaijan yet, measures have been taken in recent years to improve legislation in Azerbaijan and to adapt existing regulations to the provisions of international treaties acceded by the country, as well as to the legislation of the European Union. A number of new laws have been adopted and amendments have been made to improve environmental legislation.

The legislation mainly covered the areas of atmospheric air, water resources, domestic and industrial waste, water bioresources and protection of biodiversity. Along with the adoption of new laws, appendices and amendments to existing laws, relevant regulations and rules have been developed and approved in order to ensure their implementation.

It should be noted that the financial mechanisms for environmental protection in the country are regulated by the "Rules for payments for natural resources and rules for imposing and using of the payments for harmful substances released into the environment" which was approved by the Cabinet of Ministers of the Republic of Azerbaijan on March 3, 1992 No. 122, as well as are regulated by the Law on Environmental Protection.

Climate change is a global problem, and from this point of view, when talking about the legal framework for combating its negative effects, first of all, the international conventions and protocols acceded by the country should be mentioned. The Republic of Azerbaijan has joined 21 conventions and signed relevant protocols so far.

The country joined the UN Framework Convention on Climate Change in 1995. The country, as a non-Annex 1 party of the Framework Convention on Climate Change, has undertaken obligations such as the development and regular updating of the cadastre of gas waste with thermal effects and preparation of national data and tries to fulfill these obligations systematically.

The Republic of Azerbaijan also approved the Kyoto Protocol of the UN Framework Convention on Climate Change in 2000. The Doha Amendment adopted for the second period of implementation of obligations under the Kyoto Protocol was ratified by the Milli Majlis of the Republic of Azerbaijan on April 14, 2015.

At the same time, the Paris Agreement, which was added to the UN Framework Convention on Climate Change, was signed by the Republic of Azerbaijan on April 22, 2016 and ratified in October. According to the Paris Agreement, as a contribution to mitigating the effects of global climate change in the intended nationally determined contributions of the Republic of Azerbaijan, a reduction of 35% in the level of emissions of gases with thermal effects compared to the 1990 base year by 2030 was targeted. It should be noted that the emission of greenhouse gases in Azerbaijan makes up 0.1% of the global indicator.

The priority sectors for mitigation measures were defined as the energy (energy efficiency, and alternative and renewable energy), oil and gas production, utilities and commerce, transport, agriculture,

waste management, forestry and land use sectors within the intended nationally determined contributions.

Despite the fact that Azerbaijan has not taken quantitative obligations under the Kyoto Protocol in connection with the reduction of greenhouse gas emissions, a number of important measures have been implemented in the country in recent years, which include the application of low-carbon renewable energy and waste management technologies with high-energy efficiency, as well as the steps taken for the expansion and protection of forest areas.

In addition to national initiatives related to the mitigation, Azerbaijan successfully cooperates with a number of international organizations through the implementation of various projects. Thus, more than 30 projects have been implemented on climate change mitigation technology and capacity building in this area.

In 1997, the State Commission on Climate Change was established, and the relevant ministries, committees and other relevant organizations were included in the Commission. In order to better coordinate the environment and climate change policy, the State Committee on Ecology was abolished in 2001 and the Ministry of Ecology and Natural Resources was established. In addition, the State Hydrometeorology Committee, formerly an independent body, also became a part of the Ministry of Ecology and Natural Resources.

In 1998-2000, the Initial National Communication of the Republic of Azerbaijan to the UN Framework Convention on Climate Change was developed. In 2010 and 2016, the second and Third National Communications were developed and presented.

Within the framework of the Caspian Environment Programme in Azerbaijan, which was implemented in 2002-2005 with the Canadian International Development Agency, projects contributing to the reduction of greenhouse gases were implemented. In 2003-2006, Azerbaijan participated in the regional project on quality improvement in the process of inventory of greenhouse gases. In 2004-2005, the project on evaluation of National Communication development skills was implemented in Azerbaijan.

In 2004-2006, Azerbaijan participated in the project of Technical Support to Caucasian Countries and Moldova on Global Climate Change Commitments within the TACIS program. Since 2006, with the support of the Norwegian government, capacity building on the Clean Development Mechanism (CDM) project has been implemented.

In September 2015, the first intended nationally determined contributions were submitted to the Secretariat of the Convention.

In addition, the country's mitigation and adaptation strategies for climate change are reflected, directly or indirectly, mainly in the following documents, government programmes and development concepts:

- National Environmental Action Plan for 1998-2003 (1998);
- National Program on forest restoration and expansion (2003-2008);
- Development Program of Hydrometeorology in the Republic of Azerbaijan (2004);
- State Program on Use of Alternative and Renewable Energy Sources (2004);
- Comprehensive Action Plan on improving the environmental situation in the Azerbaijan Republic for 2006-2010 (2006);
- Development Concept "Azerbaijan - 2020: Outlook for the future (2012);
- State Programme on Reliable Food Supply of the Population in the Republic of Azerbaijan during 2008-2015;
- State Program on socio-economic development of regions (2004-2008, 2009-2013, 2014-2018 and 2019-2023);
- State Program on Poverty Reduction and Sustainable Development (SPPRSD) 2008-2015 (2008-2015);
- National Strategy of the Republic of Azerbaijan on Conservation and Sustainable Use of Biodiversity for 2017-2020;
- Strategic Roadmap on production and processing of agricultural products in the Republic of Azerbaijan (2016);
- "National Strategy for Improving Solid Waste Management in the Republic of Azerbaijan for 2018-2022";
- "Action Plan for Reducing the Negative Impact of Plastic Packaging Waste in the Republic of Azerbaijan for 2019-2020";
- "State Program for geological study of the subsoil and efficient use of mineral resources for 2020-2024".

As the main domestic institutions involved in activities related to climate change, we can mention the following:

Ministry of Ecology and Natural Resources. It is the main central executive body responsible for the policy and regulation of environmental protection, including the extraction and conservation, monitoring and regulation of natural resources in Azerbaijan and the Caspian Sea.

Ministry of Finance. It is a central executive body implementing the budget and tax policy in the Republic of Azerbaijan and arranging the management of public finance. In addition to the preparation and implementation of the state budget, the main responsibilities of the MoF include the management of public debt and obligations, implementation of state regulation in the areas of organization and implementation of accounting, and performing the state control over the use of state budget funds.

According to the regulations approved pursuant to Decree No. 48 by the President of the Republic of Azerbaijan dated February 9, 2009, the MoF participates in the development of investment programs of the state, in the preparation and implementation of state investment policy, development concepts and strategies of state programs in the manner prescribed by the legislation, ensures the implementation of necessary measures for the involvement of external and internal loans into the economy of the country,

and performs the legal regulation of other matters assigned to the Ministry upon the legislation and Regulations in the fields of budget system, tax, state treasury, public financial control, audit, arrangement and implementation of accounting.

Ministry of Energy. It is the central executive body implementing the state policy and regulation in the field of fuel and energy.

Ministry of Agriculture. It is the central executive body implementing the state policy in the agrarian sector, including production and processing of agricultural products, providing necessary services to producers, veterinary, plant protection and quarantine, efficient use of lands. It is an institution that plays a key role in strengthening the climate resilience of agriculture.

Ministry of Transport, Communications and High Technologies. It is the central executive body that carries out state policy and regulation in the field of transport, including maritime transport and civil aviation, communications (telecommunications and postal), high technologies (Information Technologies, Microelectronics, nano, bio and other innovative scientific technologies). It participates in many climate-related projects in the transport sector.

Ministry of Economy. It is a central executive body carrying out state policy and regulation in the areas of development of economic policy, preparation of macroeconomic forecasts, providing the favorable conditions for economic development and growth, promotion of investment activity, development of entrepreneurship and industry, regulation of license and permit system, prevention of monopoly, elimination of unfair competition, protection of consumer rights, public procurements, timely and complete collection of taxes and other mandatory payments specified by the law and which are included in the authorities of the ministry to the state budget, management and privatization of state property, arrangement of state management of lands, carrying out state register of real estate and unified state cadastre.

Ministry of Emergency Situations. It is the central executive body that elaborates the policy and regulation of the civil defence, protection of the population and territories against natural (geophysical, geological, meteorological, hydrological, marine hydrological, wildfires, etc) and technogenic (fire, explosion, devastation of buildings and equipment, accidents caused by disposal of dangerous chemical, radioactive and biological wastes, accidents in power engineering systems, vital utility systems, cleaning equipment, hydrodynamic equipment, facilities of oil and gas production and processing, main pipelines, and transport incidents, etc.) emergencies, prevention of emergencies, ensuring the fire security, safety of people in water bodies, navigation security of small vessels, technical security in industry and mining activities and construction security, and developing the funds of state material reserves and that performs the management, coordination and supervision in these fields, which arranges the flexible response in case of a high risk or occurence of emergency situations and the protection of institutions, facilities and equipment of a strategic importance, which are exposed to technogenic and terror dangers.

State Agency on Renewable Energy Sources under the Ministry of Energy. Agency is carrying out state policy and regulation in the field of renewable energy and its efficient use, efficient arrangement of activities on renewable energy sources, coordination of activities and state control in this field in the country.

Azerbaijan Amelioration and Water Management Open Joint Stock Company. Its purpose is to provide public services in the field of land reclamation and water economy, to carry out water supply of lands, to organize the operation of state-owned land reclamation and irrigation systems, to carry out other works related to the development of this area.

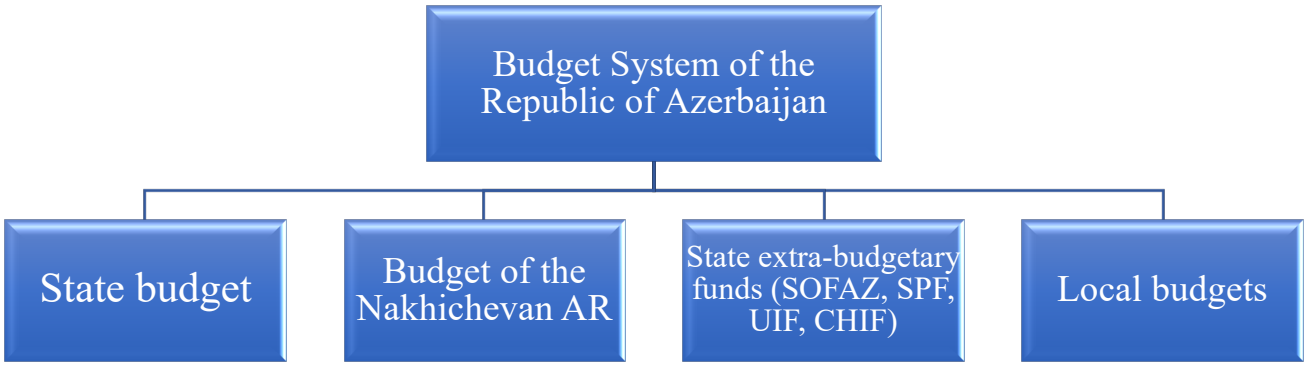
State Oil Company. It is engaged in the research, exploration and development of oil and gas fields in the territory of Azerbaijan, extraction, processing and transportation of oil, gas and gas condensate, sale of oil and petrochemical products, gas in domestic and foreign markets, as well as supply of industry and population with natural gas in the territory of the country. It is involved in a number of mitigation projects in the oil and gas sector.

3.3. Public Finance Management System in Azerbaijan

The budget system in the Republic of Azerbaijan consists of the state budget, the budget of the Autonomous Republic of Nakhichevan, state extra-budgetary funds (budgets of the State Oil Fund (SOFAZ), State Social Protection Fund (SPF), Unemployment Insurance Fund (UIF) and Compulsory Health Insurance Fund (CHIF)) and local budgets (Figure 4.).

The Law on Budget System is the cornerstone of the country's PFM legal framework. The organizational, legal and economic basis of the budget system, preparation, approval, execution and supervision of consolidated and state budgets, as well as the basic principles of the interaction among the state budget, extra-budgetary state funds and local budgets are defined by the Law on the Budget System. In addition, the Rules of preparation and execution of the state budget was approved by the decision of the Cabinet of Ministers No. 75 dated May 24, 2004. These rules define the principles of the organizational, legal and economic basis for the preparation and execution of the state budget.

Figure 4. Budget system of the Republic of Azerbaijan



According to the Law on the Budget System, the purpose of the state budget is to provide the solution of the economic, social and other strategic programs and problems of the country, ensure the collection and use of financial resources in accordance with the legislation for the implementation of the functions of the state.

The Law on Budget System of Azerbaijan, does not include provisions on CC finance, in general, or CBT, in particular.[21]

The state budget of the Republic of Azerbaijan consists of centralized revenues and expenses, local revenues and expenses. A single budget classification is applied in the Republic of Azerbaijan in order to provide a comparison of budgets and budgetary organizations included in the budget system of the Republic of Azerbaijan, as well as financial operations on non-budgetary state funds (including extra-budgetary operations of budgetary organizations). The budget classification consists of the classification of budget revenues, and the classification of budget expenditures on the basis of functional, economic, organizational and other principles. The composition of the budget classification on revenues, and its functional, economic, organizational and otherwise composition is determined by legislation. The budget classification consists of the classification of budget revenues, and the classification of budget expenditures on the basis of functional, economic, organizational and other principles.

The drafting of the state budget starts 11 months before the next budget year and covers the period until the budget project is submitted to the Milli Majlis (the Parliament) of the Republic of Azerbaijan. The draft state budget for the next budget year is prepared on the basis of macroeconomic forecasts of the country's economic and social development, targeted programs, evaluation of the results of financial and economic activity of all enterprises regardless of the spheres of economy, administrative regions and types of ownership. The drafting of the state budget starts with the decision of the relevant executive authority, which is published in the press during the third decade of January. According to this decision, the country's medium-term economic and social development program developed by the relevant executive authority is being clarified by the end of February.

In accordance with the clarified medium-term economic and social development program, the initial medium-term budget forecast (revenues, expenses, cuts and financing) and investment program for the next year are drawn up in March of the current year. The initial draft of the state budget and investment program is prepared until April 15 of the current year and submitted to the relevant executive authority for consideration along with the main directions of the budget-tax policy, upper limit of revenues and expenses at the level of sections of the budget classification, public debts, priority expenses, and the budget forecast for the following budget year and consolidated budget forecast for subsequent three years.

Until May 1, the Ministry of Finance prepares a letter of instruction (circular) on the draft state budget for the next year and compilation of consolidated budget indicators for the next three years and sends it to the organizations involved in the compilation of the budget. This guide, along with relevant

[21] Ministry of Finance. The Law on budget system of Azerbaijan.

information, provides information on the analysis (evaluation) of revenues and expenses, including the upper limit of expenses for organizations and each section, and the norms and forms approved on current expenses, supporting documents for submission of detailed budget proposal to the relevant executive authority.

When determining the financing of budgetary organizations, their extra-budgetary benefits are taken into account. Bodies performing the execution of state budget revenues and organizations financed from the budget submit the budget drafted in accordance with the instructions to the relevant executive authorities until July 1 of current year.
The draft of the state budget for the next budget year and the indicators of the consolidated budget for the next three years will be submitted to the Cabinet of Ministers by the Ministry of Finance until September 10 and the Cabinet of Ministers forwards it to the President. The draft law on the state budget for the next budget year, together with other documents attached to it, shall be submitted to the discussion and approval by the Milli Majlis of the Republic of Azerbaijan in accordance with paragraph 2 of Article 109 of the Constitution of the Republic of Azerbaijan no later than October 15 of the current year.

Coordination in fiscal issues

To ensure coordination of the economic reforms and define directions of economic policy in the fiscal, monetary, and financial and banking sectors macroeconomic and financial stability, The Economic Council was established in September 2020 and is chaired by prime minister. The Council consists of the high-level government officials including the ministers of finance and economy. The Council's mission is to coordinate monetary and fiscal policies for macroeconomic stability and to supervise the implementation of MTEF. Potentially, the Council can function as high-level inter-agency platform for mainstreaming CBT. The ministries of finance and economy hold regular coordination meetings on the annual budgeting process, and CBT issues at technical level can be also on the agenda of these meetings.

The ministries of finance and economy have no specialized staff or organizational units on climate change. In turn, the MoENR has limited capacity in PFM. Policy objectives on climate change can only be achieved when different sectors contribute in a coordinated and efficient manner, and there is critical mass of capacity at agency level.

At the ministry of finance, CBT issues can be led by the Medium-Term Expenditure Framework Development Center in coordination with the Budget Department and Financing of the Economic Fields Department. These MOF units–as part of their review of sector ministries' submissions on MTEF and annual budgets process–may potentially have an important role in ensuring that sector ministry budgets reflect CBT requirements.

Coordination on SDGs

To coordinate the implementation of SDGs, the government established the National Coordination Council on Sustainable Development. Target 13.1 concerning SDG13 on climate change have been prioritized in Azerbaijan. The council published the SDG country report in 2018 where the progress on

SDGs was reflected.[22] There are, however, no publicly available update reports on the status of implementation of SDG13 in Azerbaijan.

Ongoing PFM reforms

The Strategic Roadmap for National Economy Perspective approved in December 2016 envisaged three major PFM reforms: adoption of a golden rule for the transfer of oil revenues to the state budget, adoption of the MTEF, and implementation of results (outcome)-based budgeting.[23] The results-based approach of budgeting, which defined strategic objectives and key performance indicators, facilitates the incorporation of a climate change perspective at different levels of the budgeting process. In accordance with the provisions of the strategic roadmap, the government has implemented several institutional and PFM reforms such as adoption of the new budget rules (aimed at reducing the budget dependency on oil prices), medium and long-term strategy for public debt management, and medium-term expenditure framework.[24] The state budget for 2019 has been prepared in accordance with the new budget rule.[25] The transparency of the budgeting process has also improved. For example, for the 2020 state budget MoF disclosed detailed information on the economic, functional, and administrative classification of expenses, and on the financing of the programs from the state budget.[26] MOF has also disclosed details on the expected tax and non-tax revenues of the 2020 state budget.[27]

Rules for the preparation of the MTEF was adopted by Decree No. 235 by the President of the Republic of Azerbaijan dated August 24, 2018 for the purpose of improving the efficiency and addressability of the public expenditures and arranging the transition to the result-oriented budget framework. Along with this rule, another important document, which forms the methodological basis of the MTEF preparation process - the Rules for the preparation of Sector Strategic Plans - has been approved.

According to Decree by the President of the Republic of Azerbaijan dated February 4, 2019, it is planned to initially apply MTEF on 3 sectors (education, agriculture and environmental protection) at the pilot stage in parallel with the process of compiling the state budget project for 2021 and the budget calendar.

Currently, as the development of the MTEF is not integrated into the Law on the Budget System and the preparation of the traditional annual budget and the development of the MTEF are performed in parallel

[22] Ministry of Economy. 2018. The Government's Report on SDG Implementation for 2016-2017 years.
[23] Strategic Roadmap for National Economy Perspective of Azerbaijan. Approved by the Decree of the President dated December 6, 2016.
[24] Presidential Decree on Rules for the preparation of the Medium-Term Expenditure Framework. 24.08.2018.; Presidential Decree on approval of the "Rules for calculating the upper limit of consolidated budget expenditures in accordance with the budget rules". 18.12.2018; Presidential Decree on approval of the "Medium and long-term strategy for public debt management in the Republic of Azerbaijan". 24.08.2018.
[25] Comprehensive review of the fiscal rule and areas of improvement are in IMF. 2019. Republic of Azerbaijan : 2019 Article IV Consultation-Press Release; Staff Report; and Statement by the Executive Director for Republic of Azerbaijan. Washington DC. Annex III.
[26] Ministry of Finance. 2020. Indicators at the level of paragraphs of functional, economic and administrative classifications of state budget expenditures for 2020; Ministry of Finance. 2020. Information on the programs and similar measures envisaged in the state budget for 2020.
[27] Ministry of Finance. 10.05.2012. The decision of the Ministry of Finance on approval of "Methodology of forecasting and modeling of state revenues".

in 2020. Upon completion of the pilot stage, the MTEF process will be fully intergrated to the existing budget system and budget calendar and relevant amendments will be made to the Law.

Implementation of MTEF and result-based budgeting will be important for mainstreaming CBT in the country's PFM system; gradually move from item-to program-based budgeting, with (i) programs clearly linked to well-defined objectives that are integrated with the results of the relevant sector plans or strategies;[28] (ii) set of measurable indicators allowing the government (or an external assessor) to objectively assess the performance, outcomes, and efficiency of budget organization activities.

In 2020, MTEF is being piloted in three sectors: education, agriculture, and environment. All government agencies in these sectors (and covered under the education, agriculture, and environment protection functional classification sections of the state budget), including the ministries of environment, education, and agriculture, will be part of the pilot implementation of the MTEF. It is expected to be rolled out to other sectors after 2021.

In 2020, the government prepared the MTEF, national expenditure priorities, and sectoral strategic plans for education, agriculture, and environmental protection together with the 2021 state budget proposal.[29] From a CBT perspective, it may be expedient that all components of MTEF (including strategic objectives, outcomes, outputs, programs, projects and performance indicators) suitably reflect climate dimensions.

Transparency, accountability, citizen participation in PFM

International experience has shown that the implementation of CBT is successful in countries with strong budget accountability systems. The transparency and accountability aspects of Azerbaijan's PFM improved since 2017.[30] Azerbaijan published key budget documents (pre-budget statement, executive's budget proposal, enacted budget, citizens budget, in-year reports, year-end report, and audit report), except for the mid-year review.[31] Among other areas where improvement would be warranted are the timely online publishing of the citizens budget and the government's budget proposal containing minimal budget information. The Chamber of Accounts prepares its comments on the execution of the state budget, the budget of the State Oil Fund, as well as the budget of the relevant government agencies for social security and social protection and submit these documents to the Parliament.[32]

The Open Budget Survey 2019 noted that Azerbaijan provided few opportunities for the public to engage in the budget process.[33] Public participation opportunities in the PFM are particularly pronounced for

[28] Eurasia Extractive Industries Knowledge Hub Expert Group. 03.02.2020. Assessment of Legal and Institutional Opportunities and Barriers to the Effective Application of the Medium-Term Expenditure Framework in Azerbaijan.
[29] Explanation of the draft law of the Republic of Azerbaijan "On the state budget of the Republic of Azerbaijan for 2021". http://maliyye.gov.az/scripts/pdfjs/web/viewer.html?file=/uploads/news_files/5fe0996cc4b44.pdf
[30] International Budget Partnership. 2017. Open Budget Survey for Azerbaijan
[31] The mid-year review would normally contain a comprehensive update on the implementation of the budget as of the middle of the fiscal year and it includes a review of economic assumptions and an updated forecast of budget outcomes.
[32] The Chamber of Accounts. 2019. Information on the activities for 6 months of 2019 of the Chamber of Accounts.
[33] International Budget Partnership. 2019. Open Budget Survey for Azerbaijan https://www.internationalbudget.org/open-budget-survey/country-results/2019/azerbaijan

women in the regions where not only legal barriers but also social impediments exist. Overall, public participation mechanisms of different women groups seem to be rather limited which hinders women to express their needs and identify gaps in the top-down budgeting system to ensure that budget resources are utilized to the equal benefit of both female and male citizens.

The country's parliament, Milli Majlis, does not apply a climate change lens in its review of the submitted state budget proposals or execution reports.

Availability of climate change statistics, time use data, and climate-sensitive monitorinf and evaluation (M&E) systems

The availability of reliable CC statistics and time use data is a prerequisite for the application of CBT tools, tracking of climate-related expenditures and monitoring of CC results based on climate-sensitive performance indicators.

The State Statistical Committee (SSC) of Azerbaijan annually publishes a compilation of data in environmental protection.[34] The SSC also tracks the progress on the nationalized SDGs. Out of the 244 SDG indicators, the government has prioritized 119, which include SDG13 that aims to take urgent action to combat climate change and its impacts.[35] So far, data is available for 1/4 of all indicators. A special unit in the Ministry of Economy is responsible for the tracking of SDG indicators.

At the international level, the United Nations Statistics Division has defined a minimum set of 8 quantitative climate change indicators that are related to the SDGs and the priority areas of the Beijing Platform for Action. Out of 8 climate change indicators 6 are missing in Azerbaijan. It may be, therefore, expedient for the SDG indicator special unit at the Ministry of Economy, in consultation with MoENR, to set up a system of collecting the missing indicators.

Overall and because of the still item-based budget system, monitoring and evaluation of the performance of the allocated budget expenditures remains weak. CC data or statistics on budget expenditures are generally unavailable. Thus, climate-responsiveness of the state budget expenditures cannot be tracked even in the environmental sectors other than for climate-specific programs.

3.4. SWOT Analysis for CBT in Azerbaijan

The review of the main strengths, weaknesses, opportunities, and threats (SWOT) for CBT (Table 2), drawing on the discussion in the previous chapters, suggests that on balance commencement with phased implementation of CBT in Azerbaijan is possible now.

[34] Environment in Azerbaijan, most recently 2020.
https://www.stat.gov.az/menu/6/statistical_yearbooks/source/environment_2020.zip
[35] See Annex 7 for all nationalized SDG indicators that are relevant for the MLSPP.

Table 2: SWOT Analysis for CBT in Azerbaijan

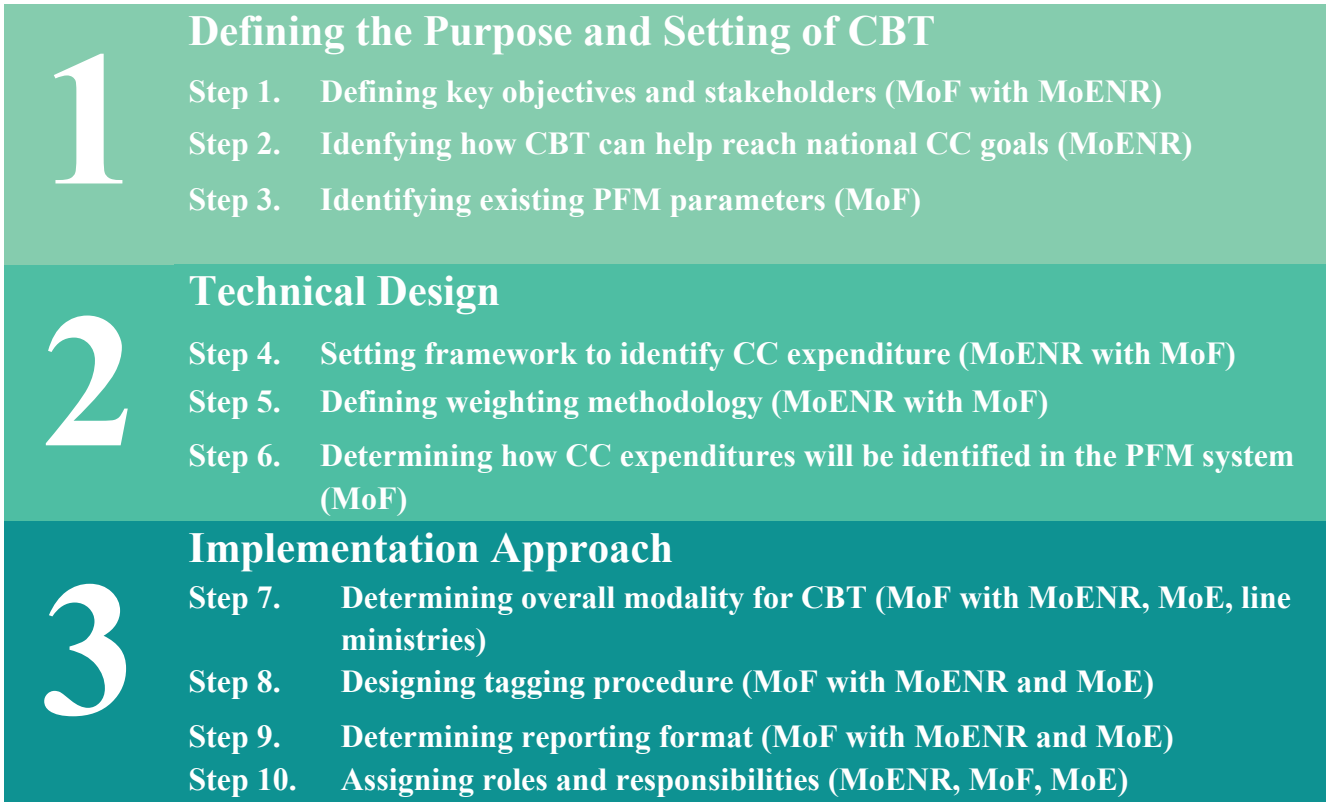
Strengths	Weaknesses
• Strategic commitment to raising public sector efficiency and strengthening PFM; • Strong institutional commitment at MoF, MoEBR, MoE; • Overall availability of climate related data and time use data in environmental protection. This data enables to conduct of detailed situation analysis in the environmental protection sector; • New technical cadre in the government open for modern and more inclusive forms of public resource management; • modern material and technical base; • close cooperation with international and regional financial institutions.	• Low level of climate-responsiveness of PFM system; • MoENR: weak capacity on PFM; • MOF: weak capacity on climate change elements of the budget process; • Line ministries: weak capacity on results-based and climate-responsive budgeting; Elaborat • Lack of country strategy and weak legal framweork on climate change; • poor integration of CC finance into budget processes; • current budget classification does not allow to determine how much is allocated to combat climate change; • financing of climate change prevention measures mainly through state budget funds, poor cooperation with global funds operating in this area; • unsatisfactory awareness of the staff on the rules for applying to international funds.
Opportunities	**Threats**
• Ongoing implementation of MTEF and strategic commitment to results (outcome) based budgeting; • Development of results-based five-year strategic plans by line ministries; • MoENR: empowered mandate on CC mainstreaming across sectors; • MoF: establishment of MTEF Development Center; • MoE: establishment of the divisiont on strategic planning; • Development partners open to support introduction of CBT in Azerbaijan; • sufficient financial resources; • Introduction of IT solutions and starting the establishment of an integrated budget information management system.	• Loss of PFM reform momentum in general and on CBT in particular because of new priorities or shocks • Separation of CBT from PFM reforms • Resistance at agency level because of misperception about the importance of CC issues in the country or because of the impression of additional workload arising from CBT implementation • Inadequate beneficiary demand because of lack of general understanding on the benefits of CBT; • state budget revenues largely allocated from the oil revenues ühich causes the budget policy to be susceptible to oil prices and poses a risk to fiscal sustainability. Since the main source of funding for climate change measures is the state budget, the costs directed to this direction are sensitive to fluctuations in oil prices; • COVİD-19 crisis has led to an increase in negative trends in the global economy and a decrease in oil price. If this situation and uncertainties continue for a long time this policy can lead to difficulties for the public finances and further fiscal consolidation.

Source: author's compilation based on analysis of various legal acts and agencies' reports.

4. Setting up National CBT System

The ten steps reflected on figure 5 are proposed to be carried out in the process of considering, developing and implementing CBT on the basis of the UNDP's CBT Guidance Note[36]. Figure 5 gives an overview of these ten steps grouped under three phases and showing for each step the government agency or agencies that will take the lead role.

Figure 5. Proposed key decision phases in CBT development process in Azerbaijan



Phase 1. Identifying the purpose and setting of CBT

The cross-cutting nature of climate change can complicate the task of defining a clear scope for CBT. Even where addressing the impacts of climate change forms one of the core strategic goals of a government, the cross-cutting nature of CC makes it highly unlikely that all CC activities can be grouped and managed as a single policy programme by one line ministry.

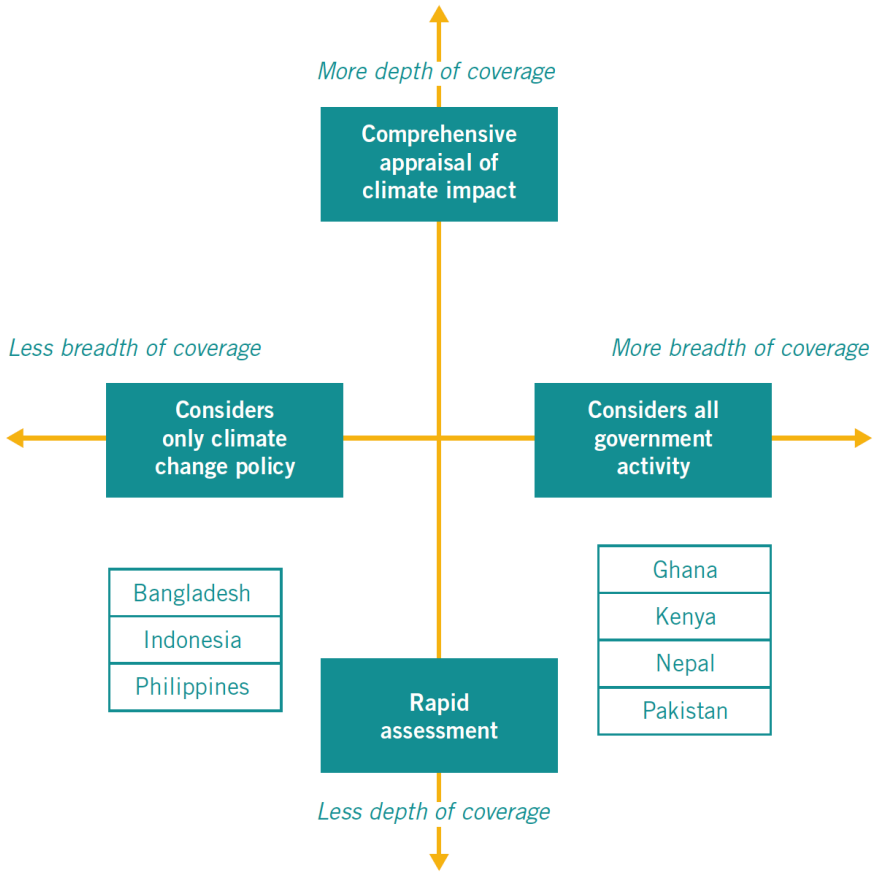
While some activities can be identified as climate action based on their explicit objectives (i.e., they articulate climate change objectives, or are linked to the national climate change policy) there are many other activities across all government sectors that may not have an explicit climate-related objective, but their implementation nevertheless has significant impact on climate change (e.g., construction projects that incorporate climate change adaptation solutions). With such activities there is also the question of

[36] Brain N., Nguyen L. Knowing what You Spend. A guidance note for governments to track climate finance in their budgets. UNDP

"additionality". For example, where a project that was already planned to be done, received additional funding to make it more climate sensitive. E.g., a road already budgeted for, being financed to make the road more resilient to floods induced damage etc. The climate related expenditure in this case, is the additional funds, that were added strictly as a response to climate change considerations. The element of additionality becomes more complex where – as should be preferred - climate change resilience is designed into the project from the outset.

Clarity on the intended objectives of CBT is the starting point for formulating its scope and key stakeholders.

Figure 6. Key parameters defining the contour of the CBT



Source: A guidance note for governments to track climate finance in their budgets. UNDP

There are two key parameters that define the contour of the CBT:

1. **Breadth of coverage** - The scope of CBT can cover the national climate change policy, which defines a number of priority sectors (e.g., in the Philippines), or encompass a wider range of (central) government activity (e.g., in Nepal and Pakistan). While the latter option will generate more comprehensive information, it requires significant capacity to generate vulnerability information and

undertake consistent assessment of a programme/project's climate change relevance across all sectors, which leads to point (2).

2. **Depth of coverage** - The level of comprehensiveness of the climate relevance analysis ranges from a rapid assessment based on project documents and consultation with government experts to an in-depth climate screening appraisal of whether the implementation brings mitigation and/or adaptation benefits. A comprehensive approach would be one modeled after environmental impact assessments of programmes.

Step 1. Define key objectives and stakeholders of CBT

The purpose of this step is for the key stakeholders to agree on government's priority objectives for CBT, which can then serve as the basis for guiding the decisions on its final design.

Suggested technical lead agencies: the bodies who share responsibility for climate planning and finance such as the MoF and the MoENR.

When introducing CBT, governments have typically pursued some combination of objectives. For example:

- Support better project design;
- Enable tracking and reporting climate finance flows internally and externally;
- Facilitate the assessment of results from climate investments;
- Facilitate the mobilization of resources from capital markets.

Table 3 summarizes common objectives of CBT, together with potential stakeholders. While the precise composition of stakeholders will depend on the context of the national governance structure, Table 2 lists stakeholders that will likely have most direct involvement in each objective. The stakeholders' main general functions and interests are briefly described below the table.

Table 3. Common objectives of CBT and respective stakeholders

Common objectives	Lead stakeholders	Supporting stakeholders
To monitor and report on national climate change policies/ action plans and international commitments, and to improve the effectiveness of existing spending	CCPB; MoF; MoE; Parliamentary Accounts Committee	Line ministries; local governments; Parliament; Supreme Audit Institution UNFCCC and Standing Finance Committee; donors & development partners; dedicated climate funds

To support mobilization of additional external financing by (a) identifying the funding gap on a regular basis, and (b) demonstrating government commitment and co-finance	MoE; MoF; CCPB; donors and development partners; dedicated climate funds	Line ministries; local governments
To mobilise climate-related action across government sectors by providing evidence of on-going climate-related activities and creating synergies	CCPB; MoE; MoF	Line ministries; local governments
To raise public awareness of climate change issues and government's climate change action	CCPB; Parliament; Supreme Audit Institution; citizens, civil society and the media, academia	MoE; MoF; line ministries; local governments

Source: A guidance note for governments to track climate finance in their budgets. UNDP

Government stakeholders' typical responsibilities[37]:

- **Ministry of Finance (MoF)** takes responsibility for public revenue and expenditure and for coordinating the budget process. The MoF also has an interest in reducing impact on economy and society from shocks such as climate change ones and limit the resulting macro-fiscal losses.

- **Ministry of Economy (MoE)** takes responsibility for coordinating long-term national development planning and issuing guidelines for ensuring that service delivery and investment contributes to improved livelihoods and economic opportunities for all. It can also play a key role in developing targeted programmes and policies to attract green investment.

- **Climate Change Policy Body (CCPB)** responsible for integrated climate change governance including developing, monitoring and coordinating a national climate policy. This role is typically played either by a Ministry of Climate Change/Environment (MOCC/E) operating independently or as the Secretariat of an inter-ministerial climate change council. In a few countries, a unit of the MoF plays this role, or a dedicated ministry or authority has been set up.

- **Line ministries** are responsible for the design and implementation of sectoral policy and for mainstreaming climate change into their sector plans and budgets. Investment agencies can be set

[37] UNDP. Hard Choices Integrated Approaches: A Guidance Note on Climate Change Financing Frameworks.

up to facilitate Public-Private Partnerships (PPPs) and state-owned enterprises with a particular sectoral scope that is climate-relevant (e.g., renewable energy).

- **Local governments and local government bodies** are the channels through which national policies and commitments on both sustainable development and climate change are implemented. Their proximity to the poor and climate vulnerable socio-economic groups and their capacity for engagement with communities can result in more inclusive and responsive climate action especially in highly decentralized countries. Local stakeholders have better access to indigenous knowledge about weather variabilities, ecological zones, local traditions and culture, and indigenous practices. Local governments may also mobilise and deliver climate finance.

In addition to institutional responsibilities, the CBT design process should also take into consideration the strategic role of any ministry that has been appointed as National Designated Authority (NDA) by international climate funds. Which ministry or ministries are NDAs depends on the country's institutional set-up, allocation of government business functions, and political economy. In some countries, one ministry can accumulate the NDA role for all funds. In other countries, they are divided between at least two ministries. Traditionally, MOCC/Es were more likely to be NDAs (in Azerbaijan, MoENR has been appointed as NDA too) but the picture is now more complex with MoFs' growing role, in particular with regards to the most recent international climate fund, the Green Climate Fund.

Key stakeholders that hold the government to account include:

- **Parliament** has the legal mandate to scrutinize and review government policies and spending, including through parliamentary committees such as the Natural Resources, Energy and Ecology and Economic Policy, Industry and Entrepreneurship Committies in Azerbaijan;
- **Supreme Audit Institution (Chamber of Accounts of the Republic of Azerbaijan)** conduct financial, compliance and performance audits, and submit reports to the Natural Resources, Energy and Ecology and Economic Policy, Industry and Entrepreneurship Committies;
- **Citizens** who are directly affected by the effects of climate change have the right to information on government's action (in some places provided by a law on public information) and to demand accountability for it;
- **Civil society, the media, and academia** influence the public opinion by analyzing, interpreting and communicating the information on government's climate change policies and spending. Specialized civil society organizations such as budget transparency organizations, women organizations, disabled people organizations play a key role in advocating to government how climate change concerns should be integrated into the budget process to mitigate its impact on the most vulnerable.

Finally, **development partners, donors and dedicated international climate funds** that provide technical and financial assistance have an interest in an effective and transparent use of climate change finance, with results that can demonstrate value for money and show how their international and domestic climate relevant finance complement and enhance each other.

Step 2. Identify how CBT can contribute to achieving the national climate change policy objectives

The purpose of this step is for the key stakeholders to articulate the linkage between CBT and the achievement of the objectives defined by the national climate change policy framework.

Suggested technical lead agency: Climate Change Policy Body

The objectives of the national climate policy framework are typically defined by the following documents:

- **National climate change policy** that defines priorities for the climate change action based on the country's context and climate change risks. The national climate change policy in Azerbaijan is not reflected in any separate document currently. However, some CC issues are included to the different state programs and action plans;
- **National CC implementation plan** or **strategy** that specifies the actions for operationalising the national climate change policy. Where the action plan is provided by international instruments such as NAPAs and NAPs[38] or in domestically developed stand-alone climate change sector specific action plans, these need to be systematically linked to government planning and budgeting. Azerbaijan has not adopted its separate national CC implementaion plan or strategy yet. The National Coordinating Council for Sustainable Development (NCCSD) of Azerbaijan was established by the Decree of the President of the Republic dated October 6, 2016 to achieve the Sustainable Development Goals. The country's long-term mitigation and adaptation strategies for climate change are reflected in the different long-term government programs.
- The country's international commitments under the UNFCCC to reduce greenhouse gas (GHG) emissions, for which governments have set their own targets in the **Nationally Determined Contributions (NDC)[39] under the Paris Agreement (2015)**. Updates on NDC progress are provided through **Biennial Update Reports (BURs)**[40] on the status of GHG emissions, mitigation actions taken, and the needs and support received. As a contribution to global climate change prevention initiatives, Azerbaijan aims at a 35% reduction in greenhouse gas emissions by 2030 as compared to the 1990 base year. The priority sectors for mitigation measures were defined as the energy (energy efficiency, and alternative and renewable energy), oil and gas production, utilities and commerce, transport, agriculture, waste management, forestry and land use sectors within the intended nationally determined contributions. Despite the fact that Azerbaijan has not taken quantitative obligations under the Kyoto Protocol in connection with

[38] The national adaptation programmes of action (NAPAs) were set up in 2001 to support LDCs in UNFCCC implementation through a process to identify activities to meet their urgent and immediate climate change adaptation needs. The national adaptation plan (NAP) process was set up in 2010 as a process to identify medium- and long-term adaptation needs, and strategies to address them.

[39] https://unfccc.int/process/the-paris-agreement/nationally- determined-contributions/ndc-registry

[40] https://unfccc.int/process/transparency-and-reporting/reporting-and-review-under-the-convention/biennial-update-reports-and-international-consultation-and-analysis-non- annex-i-parties/biennial-update-reports

the reduction of greenhouse gas emissions, a number of important measures have been implemented in the country in recent years, which include the application of low-carbon renewable energy and waste management technologies with high-energy efficiency, as well as the steps taken for the expansion and protection of forest areas.

- **The country programmes of multilateral and bilateral agencies** may also set out policy priorities and frameworks.

Table 4 gives examples of the main ways in which the CBT process and the information it generates can contribute to achieving climate change objectives and the UNFCCC goals:

Table 4. Main channels for CBT contributing to climate change policy implementation

Climate change policy aspect for CBT contribution	Examples
Strengthening the monitoring framework	• Budget and expenditure information can complement the output/ outcome performance information to give a more detailed picture of the progress towards climate policy and/ or finance targets; • Where policies and programmes are costed, the funding gap can be estimated.
Informing government planning and prioritisation	• Expenditure information can complement the output/outcome information as the basis for reviewing programme performance (economy, efficiency, effectiveness); • Budget information can serve as an indication of whether or not climate policy priorities are reflected in the country financial commitments.
Raising awareness: **- within government and among the public** **- of the scale of public spending on climate change action**	• The process of identifying climate expenditure in each ministry/sector and CBT capacity building can help increase the visibility of climate change policy objectives across the government and mobilise further action; • Communicating to the public about the scale of government's climate budget can raise the profile of the issue and mobilise support for climate change action.

Source: A guidance note for governments to track climate finance in their budgets. UNDP

As will be seen from later steps in the CBT design, one critical decision relates to the level of detail required in CBT outputs. Here there is a continuum running from expenditure simply being identified as climate relevant at one end, through a distinction between adaptation and mitigation (intermediate), to a fuller programmatic classification reflecting major themes or programmes in the national climate change policy of action plan. While increasing programmatic detail makes the CBT data more useful, there is a trade-off between complexity to allow for more granularity and disaggregation and practicality for implementation and institutionalisation purposes. A key determinant of the balance to strike will be the constraints of the national PFM system, the extent of climate change knowledge within the CCPB and the sector ministries, the full engagement of the MoF in the CBT process, the collaboration between the relevant stakeholders and the existence of internal platforms or mechanisms to enable such collaboration.

In Moldova, CBT was designed to be part of the M&E framework for the NAP. The objective was to supplement indicators on national and sectoral objectives with information on the overall spending, its distribution among sectors, and sources of funding (external/domestic). Reports that will be developed at sectoral and national level are intended to inform the subsequent planning. It should be noted that key adaptation indicators such as the number of direct and indirect beneficiaries from introduced adaptation and climate resilience measures or number of people permanently displaced from their homes/ localities due to floods, landslides, droughts are not required to be disaggregated by sex or any socio-economic or demographic groups disproportionately affected by climate change.

Step 3. Identify the parameters set by the existing PFM system

The purpose of this step is to ensure that the CBT development process, its technical design and implementation procedure are grounded in the national PFM system.

Suggested technical lead agency: Ministry of Finance

Given the objective of CBT to institutionalize tracking of climate related expenditure, its design and implementation needs to be grounded in the existing PFM system. Table 5 outlines the key PFM features relevant to CBT and briefly describes the considerations around those when designing and implementing a CBT system.

Table 5. Key PFM features relevant to CBT

Key PFM feature relevant to CBT	Description of key considerations for CBT
Roles and responsibilities	• Whose involvement, leadership and ownership is needed to institutionalise the tagging system in the PFM processes? • How to align the functions of MoF/MoE/Auditor General/Parliament with the tasks of CBT design, implementation procedure, and reporting arrangements?
Budget approach and presentation	• Is the budget developed and published as a programme-based budget? • If not published, is programmatic data captured during a) budgeting and b) expenditure reporting that could be used for CC financial reporting? • If there is no programmatic data, can another classification (e.g. functional, project) serve as a proxy for programmatic classification?

Key PFM feature relevant to CBT	Description of key considerations for CBT
Budget and account code structure	• Where could the climate budget tag or code be applied? • Does the chart of accounts (COA) include either a programmatic/activity field or a field that can be used for cross-cutting policy themes? • If not, is it an option to create an additional segment in the COA that can be used for cross-cutting themes? Could such a segment be multi-character? • If not, is it an option to create a parallel module tagging the programs automatically without changing the COA structure? • Are budget and account code aligned? If not, can a mapping be created to link budget and expenditure?
Other budget-related aspects of tagging	• At what stage of planning and budgeting should the climate tag be assigned and by whom? • What routine PFM documents need revision in order to incorporate a CC dimension? Is there a need for additional PFM documents? • What type of guidance documents on methodology are needed to accompany the routine PFM documents (if any)? • Who and at what stage should review/validate the tagging and on what basis? • At what stage of planning and budgeting should CBT-generated information be used as input?
IT systems at national level	• Is there an integrated financial management system that can enable tracking of the climate budget and expenditures? • If not, a manual approach to tagging would need to be developed.
PFM and IT system at subnational level	• Can expenditure at subnational level be tracked by the central government – including to a programmatic level? (a) If yes, can the CBT system design and procedure mirror that designed at the central government? (b) If not, what approach can be used to determine CC relevant expenditure at sub-national level?
Parastatals and donor funded expenditure	• How does the PFM system capture expenditure on donor funded programmes? Is there a system for recording any off-budget expenditure that can be used in the CBT process? • Does the PFM system capture expenditure by parastatals or other semi-autonomous agencies/directorates?
Other thematic codes and how they function	• How can CBT build on any existing thematic tagging systems (e.g. gender, poverty)? (a) Can the existing procedures be replicated to facilitate the implementation and reporting on/by line ministries? (b) Are there any lessons to optimise CBT design and implementation?
Standart reports generated	• Considering their use and audience, which mainstream government financial reports are most relevant to the objectives of CBT and provide climate change expenditure information integration opportunities? • Is there a need to publish a stand-alone climate budget report?

Key PFM feature relevant to CBT	Description of key considerations for CBT
PFM reforms	• What are the priorities for PFM reforms in the country, and what is the pace and direction of travel? • What implications might that have for the development and any phasing of CBT?

Source: A guidance note for governments to track climate finance in their budgets. UNDP

Off-budget expenditures

The scope of expenditure that can be tagged and analysed is necessarily determined by the budget and expenditure coverage. Some public resources may be "off-budget" i.e., not be captured in the budget – for example, some external funding from donor assistance, international climate funds, etc. Additionally, some public resources, which may or not be off-budget, may be "off-treasury" i.e., not be routed through a government's treasury systems – for example some funds routed through state-owned enterprises or other entities (such as national climate funds delivering outside treasury systems).

An example is Kenya, where the CPEBR established that close to 40% of the government budget is released to parastatals, agencies, semi-autonomous agencies as transfers, and not through the Integrated Financial Management Information Systems (IFMIS). Therefore, tracking and tagging such expenditures requires a manual system of reviewing CBT.

Tracking climate expenditures that are incurred off- budget and/or off-treasury may require developing a separate methodology. While the omission of such expenditure leads to under-reporting of climate expenditures, a flawed methodology for addressing this issue may result in the opposite situation - over-reporting and double counting of expenditures.

In the case of external funding, whether it is entirely or only partly channeled through government system will vary from country to country.

Some other approaches to capturing external funding for CBT implementing countries may be summarised as follows:

- In Ghana, the government collects data on external climate funding to Civil Society Organizations (CSOs) and private sector manually through a bi-annual survey on international climate financing.
- In Kenya, donor funding – other than from multi-lateral agencies or provided to non-state actors - must be signed off by the Treasury and administered through the Government budget. In future, the Government plans to issue a separate climate finance report that would cover expenditures in non-state sectors.
- In Indonesia, the government revised its regulation on foreign loans and receiving grants in 2011 to require all international actors providing external financing outside the Treasury to be reported to the MoF as part of state budget reporting.

Sub-national expenditures

Local governments also mobilise and deliver climate finance, particularly in autonomous regions or federal governments, and a significant proportion of climate relevant expenditure may take place under the control of sub-national authorities. A complete picture of a country's spending on climate change action is only possible to obtain if spending at subnational level is included. The ability to monitor the levels - and categorize the types - of spending at subnational level is also important given the diversity of climate change issues in different localities and their mandates to provide services or define own measures relevant to climate change mitigation/ adaptation.

However, designing a CBT system that also captures subnational climate relevant expenditure poses a challenge in many countries as PFM systems and capacity are usually less advanced at the local level. A common problem is the absence of a unified structure for classifying expenditures at national and subnational levels. This explains why, Pakistan, which has a unified classification structure for budgets and expenditures and IT coverage across the three tiers of the government, has been able to gradually roll out its CBT to provinces using a procedure that mirrors that at the central government.

Phase 2. Determine the technical design

Given the broad scope of what can be defined as climate change action across different sectors, CBT should be designed to enable the government to analyse climate spending by relevance and, where practical, by types of interventions. While less complex designs, perhaps driven by existing capacity, will facilitate initial implementation, it is important for the system to be able to evolve over time (to capture for example the implications of climate science and policy evolutions for what qualifies as climate relevant in the budget) and provide information for a robust analysis.
The technical design of CBT comprises the following three steps, which together determine the underlying complexity of a CBT system.

- First, defining and classifying climate expenditures by types of interventions;
- second, assessing and "weighting"[41] the climate relevance of those expenditures; and
- third, determining how those expenditures will be identified, or "tagged", in the PFM system.

Step 4. Define and classify climate related expenditure

The purpose of this step is to set a framework for identifying public sector expenditures that are climate change relevant. This will typically be a list of sector-specific activities or activity categories grouped by types of interventions that can be applied across different line ministries.

Suggested technical lead agency: Climate Change Policy Body

[41] Weighting involves assessing the climate relevance of expenditure and is further detailed and explained under the sub-section on Step 5

a. Basis for identifying climate expenditures

The following can be used as reference for defining climate change action and identifying relevant activities in specific sectors:

- National climate change policy/action plan, which typically identifies the priority sectors, ministries and programmes, as well as sector- level climate change action plans or sectoral plans that have incorporated climate change considerations;
- Definitions for climate change mitigation and adaptation as part of the "Rio Markers" developed by the OECD-DAC to track climate-related ODA (Annex 1);
- Definitions and criteria for adaptation and mitigation developed by the multilateral development banks (MDBs) to track their investments (Annex 2).

The choice will depend on the primary objective of CBT, whether it is to monitor national policy/ action plan implementation through the national budget, or to demonstrate a capability for tracking external funding. In practice, these approaches are not mutually exclusive, and several countries have adapted the OECD-DAC or MDB definitions and criteria to their national contexts.

The list can be updated over the course of implementation or through periodical reviews. In the Philippines for example, line ministries identify relevant expenditures by referring to the guidelines issued jointly by the Department of Budget and Management and the Climate Change Commission (CCC) but in case an activity does not feature in the list, it can be submitted for CCC's review and potential inclusion.

As well as positive expenditure on climate action, some public expenditure (or revenue foregone such as fuel subsidies) may have a negative impact on climate change. To date no country has incorporated negative expenditure into CBT.

b. Creating a typology[42] of climate expenditures

The purpose of creating a typology/classification is to enable analysis of the composition of climate change spending. If the typology is related to the national climate policy and action plan there will 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 ensures consistency of multi-year comparisons that administrative classification does not, given that ministries and public agencies may undergo restructuring over time. It is generally recommended that at a minimum, the typology should enable differentiation between mitigation and adaptation activities, and - if the existing account code structure does not already allow for it - sources of funding, and location of the spending unit.

[42] Note that a Step 4 typology (reflecting different types of interventions) is not the same as grouping expenditures into degrees of relevance (e.g., high, medium, low), which is part of the weighting process covered in Step 5.

The following can be used as reference for classifying climate change activities into types of interventions (e.g., policy development, research, service delivery, etc.):

- National climate change policy/action plan may provide a structure for grouping climate change action (e.g., by strategic objectives or themes, and even programmes if the design of the climate policy/action plan allows for it). This approach enables linking budget allocation to national policy priorities.
- UNDP's CPEIR Methodological Guidebook presents a standard typology with three pillars (policy and governance; scientific, technological and societal capacity; and climate change delivery), which are then further broken down by category and task (Annex 3). The standard methodology allows for the construction of robust times series by type of climate spending regardless of changes in the administrative organization of the country. This approach also enables comparison between countries adopting this methodology.

As in the case of identifying climate-relevant expenditures, the two approaches are not mutually exclusive and can be used to complement each other. In both cases, new categories can be added as they emerge. However, this needs to be balanced with the consideration that the more detailed and complicated the system becomes, the more risk of errors in classification.

Step 5. Define the methodology for weighting the tagged expenditure

The purpose of assigning a weight to each identified expenditure is to reflect its degree of relevance (i.e., what portion of the activity's budget serves directly the climate change objective) and avoid inflating the scale of climate spending.

Suggested technical lead agency: Climate Change Policy Body in collaboration with the Ministry of Finance

The process of weighting is an attempt to reflect the fact that not all expenditure identified as climate relevant is equally relevant. So for example in Bangladesh, under the Climate Fiscal Framework weighting methodology used until budget 2017/18, projects which "directly [and fully] address one or more of the Bangladesh Climate Change Strategy and Action Plan thematic areas" were regarded as 100% climate relevant; while those addressing "land stabilization and protection of coastal areas" were 60% relevant; and those concerning "toxic waste management" were 30% relevant.

Weighting an activity/programme/objective essentially involves two steps:

1. Categorizing its relevance;
2. Determining a percentage weighting to apply to the budget and expenditure given that category.

Thus, in Ghana the first step involved categorizing policy objectives into high, medium and low relevance. The second step involved assigning weights of 100%, 50% and 20% respectively to those three categories.

These two steps may be combined when relevance is categorized by a percentage, and that same percentage is applied to the budget and expenditure as in Bangladesh.

Once the climate relevance has been assigned a weighting, and if not already done so during the weighting process, countries typically group the weighted activities into a hierarchy – e.g., highly relevant; relevant; medium relevance; low relevance/neutral.

Two main technical approaches to weighting relevance have been used by countries – the objectives-based approach and the benefits-based approach. Typically, the former is simpler, while the latter is more complex and time-consuming, but potentially more robust.

- **Objectives-based approach:** weighting is determined by an assessment of the relevance of a programme/ activity's stated objectives. One example of the objectives-based approach is use of the CPEIR climate relevance index, where the declared objective of the activity is mapped against the index (from highly relevant to marginally relevant or neutral). Each relevance level corresponds to a weight on the scale of 0-100%, indicating the proportion of the expenditure to be counted as climate relevant. The mapping of objectives against the index is usually based on the judgement of the officer performing the tagging based on the information contained in the project document/planning template. When reporting on the total climate budget it is important that items with large budget in absolute terms, but only marginal climate relevance are reflected.
- **Benefits-based approach:** this approach involves applying a benefit cost ratio, where the weight is determined by analysing the benefits when climate change impacts materialise compared to the situation without climate change. The method identifies the "additional" climate change component of an activity on more objective grounds compared to subjective judgement of the declared objectives in the CPEIR climate relevance index method. However, this approach is not always feasible due to data requirements and the complexity of the analysis.

$$CC\% = (B - A) / B$$

A = the benefits that would be generated by the action, if there was no CC
B = the benefit that would be generated with CC

The benefits from an action are those conventionally recognised in national planning and include: economic benefits (e.g. incomes, assets), social benefits (e.g. education, health, welfare, gender) and environmental benefits (e.g. biodiversity, reduced pollution). For major investments, the benefits may be estimated as part of an economic analysis (e.g. rates of return for irrigation, roads, new crop varieties, energy investments). For other actions, they may be defined as outcomes in logical frameworks, with

associated indicators (e.g., people protected from floods, hectares of forest planted, number of households).

Note that the benefits-based approach typically results in lower estimates of climate relevant expenditure – mainly because the maximum weighting under the objectives-based approach is typically 100%, while under the benefits-based approach it is typically 33%.

Given the potential complexity of developing a weighting methodology, countries have taken different approaches to facilitate national implementation. Three examples are shown in Table 6 along with their advantages and disadvantages.

Table 6. Examples of three countries' approaches to introducing weighting methods

Country example	Advantages	Disadvantages
Nepal's climate relevance index (highly relevant; relevant; neutral) is assigned to a programme based on the sum of budgets of its relevant activities expressed as proportion of the programme's total budget.	The relatively simple method made it possible to roll out CBT to line ministries within a short period of time.	Lack of flexibility at present. E.g. The size of highly relevant climate budget appeared over- stated in 2017/18 as block grant transfers to the newly established local governments were marked as relevant. These large, unanalyzed transfers distorted the overall picture.
Bangladesh has calculated percentage weightings for each of the 44 programmes under the national CC action plan (BCCSAP) using statistical methods.	Facilitates good linkage to BCCSAP and gap analyses. Also enables line ministries to link their projects to multiple BCCSAP programmes and weights.	May provide a spurious level of accuracy if there is not robust review of the methodology and its results.
Indonesia decided to implement CBT with the weighting component to be introduced only at a later stage recognizing the complexity of developing a robust cost-effectiveness methodology and the consensus-building it entails.	Delaying the introduction of the weighting component allows time to build a consensus around the methodology. More complex methods can produce more objective results that links spending to its outcome.	The accuracy of complex methods depends on the availability and reliability of data and capacity to conduct the analysis. The investment of time and effort to develop and periodically update the method needs to be balanced with potential gains in the accuracy of estimates. Until very recently Indonesia has only tagged mitigation expenditure, where it may be more feasible to defer weighting.

Step 6. Determine how climate change expenditure will be identified in the PFM system

The purpose of this step is to determine how climate change expenditure will be identified in the PFM system by deciding the most relevant and feasible dimension of the chart of accounts for tagging or coding climate change budget/expenditure, and the desired level of detail.

Suggested technical lead agency: Ministry of Finance

The key to identifying types of expenditure in a country's PFM system is in the country's chart of accounts (COA) code structure. The COA structure typically consists of several segments, such as for administrative/functional units, economic, programmatic, source of funding and geographic classifications.

That COA structure is also likely to be used for preparing budgets, although the budget system may omit some segments (e.g., relating to location of expenditure) and also may have some additional segments or features (particularly around programmatic detail). An important decision to be made is whether a country will tag budget, expenditure or both. While the ideal is clearly to tag both, it may be more complex to tag expenditure because the financial controls around payments and expenditure are likely to result in less flexibility in the budgeting system. So, for example in both Nepal and Pakistan, CBT was initially applied just to budgets, but has subsequently been rolled out to cover expenditure as well. While the details of the budget code tagging arrangements will be developed in the implementation design phase – particularly in Step 8 – it is important to determine the main key that will link climate change budget/expenditure and the PFM system as part of the technical design phase. This is because it is an iterative process that needs to be combined with steps 4 and 5 – as well as building on the work done in steps 1-3. A variety of factors need to be balanced, including:

- the capability of the PFM budget and expenditure systems, and particularly whether the climate tag can be a multi-character part of the COA (as in Bangladesh and Kenya), or whether it should be a simpler, possibly one character code attached to a COA segment (e.g., Pakistan and Nepal), perhaps building on existing arrangements for thematic tags such as gender or poverty reduction;
- the extent to which the desired classification system for CC expenditure can be supported – trade-off between detail and expediency;
- whether the desired weighting scale can be captured;
- the entry point for tagging, which ideally should be the same as the dimension used for identifying climate relevant expenditure under step 4. Based on the common practices for the identification of climate change expenditures in case study countries, this will typically be the programmatic classification segment - the majority of case study countries have identified the activity level as the most appropriate.

Phase 3: Determine the implementation design

The choice of the implementation modality is important for determining how centralized (i.e., involving primarily MOF and CCPB) or broad-based or decentralized (i.e., requiring active involvement of line ministries) the CBT process is. While the latter approach will require significant capacity development for line ministries, it can help raise their awareness of climate change action as a government priority. An alternative approach is to implement CBT in a phased manner, starting with a more centralised approach to tagging and gradually delegating it to line ministries, and eventually expanding beyond tagging and towards greater integration of climate change in the budget cycle. An important consideration in the design will be the government's administrative structure, and whether for instance

there is a federal or unitary form of government and the extent to which budgets and decisions are devolved to the sub-national level.

Step 7. Determine the overall modality of the CBT system

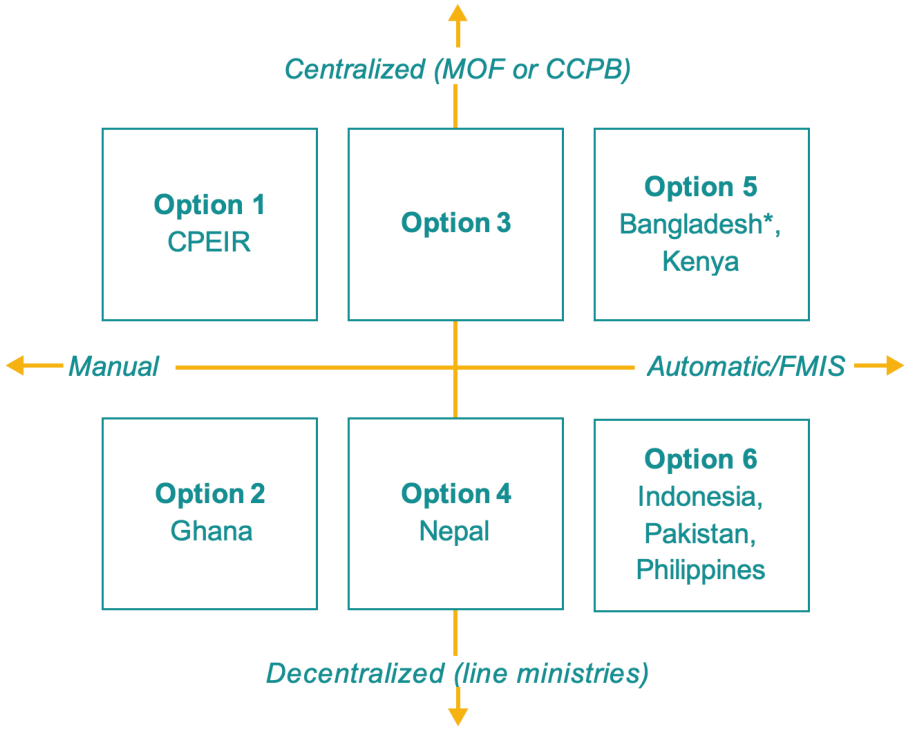
The purpose of this step is to outline the main features of the CBT architecture, based on (a) whether tagging should be centralised (i.e., done by MOF or a Climate Change Policy Body) or decentralised (i.e., done by line ministries); (b) how automated and integrated into FMIS the tagging should be.

Suggested technical lead agency: Ministry of Finance in consultation with the Climate Change Policy Body, the national planning body, and line ministries

Figure 7 shows a model developed by Pakistan to illustrate the various options and maps the case study countries as examples. Table 7, from the same source, explains each option, its advantages and disadvantages. The feasibility of particular options will depend on:

- The complexity of the identification and weighting methodology, and the necessary capacity at implementing ministries;
- The availability of IT systems across all parts and levels of government and the extent of their integration.

Figure 7. Modalities for climate tagging system



*With the introduction of the new IFMIS in 2018, Bangladesh is migrating to Option6.

Table 7. Summary of modalities for assigning the climate tag

Option	Description	Advantages	Disadvantages
1	An expert gathers information from the budget database after the budget data are compiled, and produce a separate table (e.g. in Excel) with the CC-relevant budget allocations and expenditures.	• Simple solution that does not require extensive involvement from government agencies – easy to get agreement to implement this option. • Methodology is applied centrally – no need for capacity development in line ministries. • Allows for the prompt publication of annual ex-post climate change budget allocations reports.	• Not an institutional solution and hence not sustainable. • Manual work is extensive and entails quality risks (manual data input errors). • Fluctuating methodology (as experts may change over time) can undermine the comparability of results. • Process not linked to the development stages of the budget cycle.
2	Methodology identical to Option 1 with the exception that the MOF or CCPB requests line ministries to identify and calculate the relevant expenditure, following an operational manual and capacity development. The data is then assembled centrally, at MOF or CCPB.	• Line ministries can identify climate-relevant expenditure better as they have better understanding of their programmes. • Tagging process is more institutionalized than in option 1. • Tagging process better integrated to the budget cycle and therefore more "institutional" compared to option 1.	Same as for Option 1. • In addition, requires capacity development for line ministries and issuance of guidance by CCPB and/or MOF. • Requires amendment to the Budget Circular or the issuance of a separate circular to which MOF might be resistant for various reasons.
3	Centrally located expert/unit produces a "mapping table" or a separate record (e.g. in the planning and budgeting application), mapping the climate-relevant expenditures (with additional fields, such as the weighting, mitigation/ adaptation, source of funding) with the coding structure of the FMIS system. This means that the expert does not interfere with the FMIS system but only requests a new reporting module to be	• Calculations are automatic, and reports are generated quickly and in formats required. • Data comes from the FMIS, so errors in reporting are excluded. • Easy to get MOF agreement as FMIS structure is untouched. • Easy to update the weights whenever required as the mapping table itself will be outside of the FMIS.	• The initial construction of the "mapping table" requires time. • Requires IT engagement from MOF to develop the new reporting module. • Risk to sustainability: still requires some manual work for annual update of the "mapping table" with the new information. • Engagement of Line Ministries relatively modest. • Reporting on climate change is automatized but remains "ad-hoc".

Option	Description	Advantages	Disadvantages
	incorporated in the FMIS, which will extract information from the main database, align/check with the mapping table and produce the reports.	• Only one/few experts need training.	
4	Same as the option 3 but the "mapping table" or separate record (e.g. in the planning and budgeting application) is developed in the line ministries [e.g. in Nepal the Budget Management Information System includes a climate tag field which is completed by the line ministry planners].	Same as for Option 3. • In addition, line ministries can identify climate-relevant expenditure better as they have better understanding of their programmes and are strongly involved in the process with potential long- term beneficiary impact on budget formulation process.	• Requires greater time investment during the initial construction of the "mapping table" as line ministries' tables need to be assembled into a one table at the center. • Requires IT engagement from MOF to develop the new reporting module. • Requires significant capacity building in line ministries on how to populate the mapping table. • Dependent on the existing access rules to the FMIS database, this option may require giving additional rights to line ministries that may pose IT security risks. • Requires an additional "cross-checking" function by the central mapping expert. • Sustainability risks increase as this option requires annual update of the "mapping table" by more actors. • Reporting on climate change is automatized but remains "ad-hoc".
5	A segment is identified in the COA to incorporate identifiers for climate change (and its additional characteristics). Depending on the existing structure of the COA and availability of a suitable field for CBT, this may involve a change in the structure of the FMIS database. The climate relevant expenditures are identified and tagged by a centrally located expert at MOF or CCPB.	• Sustainable solution, as climate tag is embedded in the database structure and filling it in becomes mandatory during budget data input processes. • High accuracy and speed of reporting.	• May meet with MOF's resistance as this option requires changes in the FMIS system. • Requires time (and potentially significant financial resources) to upgrade the FMIS. • May require formal adjustment of the normative acts on the general ledger fields, classification, etc. • Requires capacity building for the budget data operators. • Requires regular update of the weighting criteria in the database itself.

Option	Description	Advantages	Disadvantages
6	Line ministries identify and code climate change activities in their budget submissions based on a standard framework; and can submit additional ones for the review and approval of the centrally located technical unit at MOF or CCPB.	Same as Option 5. • In addition, line ministries can identify climate-relevant expenditure better as they have better understanding of their programmes. • Climate change expenditure reporting fully mainstreamed and formalized throughout the budget cycle. • Involvement of Office of Comptroller and Auditor-General facilitated in terms of oversight.	Same as Option 5. • Requires significant capacity building in line ministries on how to populate the mapping table.

Source: A guidance note for governments to track climate finance in their budgets. UNDP

Step 8. Design the tagging procedure

The purpose of this step is to define the procedure for assigning climate tags that is in line with the existing budget process and institutional mandates.

Suggested technical lead agency: Ministry of Finance in consultation with the Climate Change Policy Body and the national planning body

Table 8 outlines the three key elements the CBT process should determine, and the potential advantages and disadvantages of the options for each.

Table 8. Options for determining the key elements of the cbt procedure

Options	Advantages	Disadvantages
Who assigns the climate tag i.e., identifies the climate relevant expenditure and its other features (such as typology group and weight)?		
(a) Centrally located expert / unit at MOF or CCPB	Only one / few experts need training; easier to ensure consistency of quality.	Centrally located expert / unit might have limited understanding of line ministries' programmes.
(b) Line ministries	Line ministries have better understanding of their programmes; involvement of line ministries helps raise awareness of climate change across government.	Requires capacity building for line ministries.

Options	Advantages	Disadvantages
At what stage of the budgeting process are climate tags assigned?		
(a) During planning when activities are developed (by line ministries)	Can promote consideration of climate change from the planning stage; can help strengthen link between plan and budget	Needs to be updated once the budget is allocated.
(b) After initial budget inputted into system	Reflects any reviews to budget allocations (e.g., by the parliament); does not require additional time to review and update the tagging.	Risk that line ministries don't factor in climate change impacts when developing their projects and budgets.
(c) Tagging expenditure	The actual level of spending is measured.	Budget and expenditure cannot be compared, which provides an incomplete picture of climate budget execution, especially in context where the use of virements is widespread.
(d) Combination of the above	Provides the most comprehensive picture	Unless there IFMIS is in place, requires significant effort to create manual mapping of budget and expenditures
How and by whom is the tagging validated?		
(a) CCPB or a unit at MOF in the budget review process	CCPB/MOF are likely most familiar with the procedure	Potentially limited objectivity of assessment
(b) Auditor General	Contributes to mainstreaming climate change throughout the PFM process	May require a change in the mandate of the Auditor General; requires capacity building for the Auditor General
(c) Independent peer review (e.g., by research institution)	Provides the most objective assessment.	Requires additional time to incorporate in the government processes.
(a) A combination of the above.	Provides the most comprehensive assessment.	Requires time and coordination; and the need to reconcile potentially different findings.

Source: A guidance note for governments to track climate finance in their budgets. UNDP

Regardless of how the roles and responsibilities are assigned, it is important that there is an active collaboration between the various parties involved, especially during (a) the design process and (b) the initial stages of implementation.

Step 9. Determine the format for CBT reporting

The purpose of this step is to identify the reporting format for climate change expenditures that reflects the objectives of introducing CBT.

Suggested technical lead agency: Ministry of Finance in consultation with the Climate Change Policy Body and the national planning body.

Table 9 suggests possible formats for reporting the information generated by CBT depending on the CBT's main objective and the respective target audience.

While additional dedicated reports can be tailored to the intended audience incorporating information on climate change expenditure in government's mainstream financial reporting will help ensure sustainability. This can be done, for example, by adding a climate change budget as an annex to the budget, or by incorporating information on climate change expenditure in government's annual financial statement and national economic surveys.

Table 9. Options for reporting the climate expenditures

Objective	Main target audience	Reporting formats
To monitor national policies and international commitments, and to improve the effectiveness of existing spending.	• CCPB • MOF • Line ministry planners • Parliament • Supreme Audit Institutions • International bodies (incl. UNFCCC)	• Part of mainstream financial reporting • Dedicated report by CCPB tailored to the Parliament / international climate change bodies
To support mobilization of additional external financing by (a) identifying the funding gap on a regular basis, and (b) demonstrating government commitment and co-finance.	• Donors • Development partners • Dedicated Climate- Change Funds	• Part of mainstream financial reporting • Dedicated report by CCPB • Dedicated report by any Agency playing the role of NDA
To mobilise climate-related action across government sectors by providing evidence of on-going climate-related activities.	• Line ministries • CCPB	• Part of mainstream financial reporting • Separate reports by line ministries to MOF / CCPB
To raise public awareness of government's climate change action.	• Citizens • Civil society and the media • Academia	• Part of mainstream financial reporting made public • Part of citizens' budget or a dedicated citizens' climate budget

Source: A guidance note for governments to track climate finance in their budgets. UNDP

Step 10. Assign roles and responsibilities for CBT development and implementation

The purpose of this step is to - based on the tasks outlined in the previous steps - assign clear roles and responsibilities among the key stakeholders, while ensuring their active collaboration.

Suggested technical lead agency: Jointly decided between Ministry of Finance, Climate Change Policy Body and the national planning body.

When assigning the roles and responsibilities to respective government bodies, these should reflect their specific mandates, technical expertise, as well as the ability to ensure continuous leadership – both political and technical.

Conclusions and Proposed Next Steps

Report finds that financing of the climate related measures is poorly integrated into budget processes in Azerbaijan, because:

- the current budget classification does not allow to determine how much money is allocated for measures to combat climate change;
- lack of a separate item of expenditure on measures and activities for combating climate change in the current budget classification of Azerbaijan makes it difficult to record and analyze public expenditures in this area;
- climate change is cross-sectorial;
- difficulty in designating a single ministry/minister for climate change mitigation and adaptation activities;
- outcomes are more challenging to assign and monitor.

The ongoing reforms on implementation of MTEF and transition towards results-based budgeting present a good opportunity to implement CBT in Azerbaijan. MOF's instructions on program-based action plans, financial requests for new policy initiatives and medium-term budget forecasts require the budget organizations to prepare performance indicators and targets. CC indicators should be an integral part of such performance indicators.

The proposed measures for introduction of CBT in Azerbaijan can be grouped in institutional, data and information management, and public financial management system dimensions:

1. Institutional

- The MoENR could propose to the Cabinet of Ministers an establishment of the Climate Change Policy Body (CCPB) which will be responsible for integrated climate change governance including developing, monitoring and coordinating a national climate policy.
- The MoENR could initiate development of the National CC policy and National CC Implementation Strategy.
- The government agencies most pertinent to CBT implementation (MoF, MoENR, MoE, SSC) and other selected line ministries) assign an organic unit in their organization structure and staff to be responsible for CBT implementation.
- MoF could propose to the Cabinet of Ministers to set up a CBT technical working group to develop an action plan on mainstreaming CBT in the country's PFM system. This group could submit regular progress reports on the status of CBT introduction and seek support in addressing emerging issues.
- MoF and MoENR, with possible support of development partners could prepare methodological guidelines on CBT and submit it to the Cabinet of Ministers for adoption.

- MoF and MoENR, with possible support of development partners, facilitate delivery of CBT awareness raising and capacity building for climate change and CBT focal points and related staff in the government agencies, Parliament, Chamber of Accounts, and local administrations.
- MoF could discuss progress with CBT implementation in the annual budget execution report submitted to the Government and Parliament.

2. Statistics and information management

- MoE, MoENR and SSC could set up a system of collecting the missing quantitative climate indicators related to the Sustainable Development Goals.
- MoF, MoENR and SSC could set up a joint task force to develop proposals on the planning, collection, monitoring, and reporting of climate change related data on service delivery.
- MoF could integrate CBT process to the newly built Budget Management Information System.
- MoF could open CBT webpage on its website as repository of CBT related documents and information, with cross links to relevant sources at other government agencies' websites (e.g., MoENR and SSC). Over time, this webpage could be expanded to become a platform for knowledge sharing between different sector ministries and posting of regular e-newsletters on climate-change activities and reflect climate change related data on service delivery performance plans and actual delivery.

3. Public Finance Management System

- In order to bridge CC planning with regular budgeting processes CC Financing Framework should be integrated into the MTEF process, as well as into budget templates and guidelines (circulars). MTEF guidelines could contain climate related requirements to ensure the government agencies' medium-term budget proposals adequately reflect the climate dimensions. Through the letter of instruction and the annual budget request forms, the MoF could require the government agencies to include climate change assessment and climate change related information in their revenue and spending proposals.
- MoF, could define CC criteria as an additional weight in expenditure prioritization process.
- MoE could amend the Rules for the State Investment Program (SIP) and the related forms issued to the government agencies to reflect climate dimensions of the proposed public investment projects.
- The draft law on budget submitted to Parliament could contain information about its climate relevance. Specifically, an explicit discussion of climate change impacts of the intended program and activities can be embedded in the MTEF.
- MoF would need to consider meaningful integration of CBT in the ongoing and planned PFM reforms, including those towards results-based budgeting.
- State Treasury Agency could review international experience on tracking budget expenditures for climate change and develop proposals on possible tracking of budget expenditures for CC within the current PFM system.

- MoF and MoENR could start (i) doing CC Climate Public Expenditure and Institutional Review (CPEIR) of the MTEF pilot sectors, and (ii) reflecting CC allocations or CC Citizen's Budget in the annual and quarterly budget execution reports submitted to the Parliament.
- The Chamber of Accounts, based on international experience, could start developing guidelines for ex-post evaluation of the agency performance of public service delivery with focus on CC finance.
- The Parliament could consider inviting MoENR to the budget hearings to inform on the state of climate change in the country and government´s ongoing and proposed activities to decrease negative effects of climate change.
- CC budget reporting and collaborative research on CC expenditures with CSOs should be applied in order to increase accountability for budget spending on CC.

Annex 1. OECD-DAC definition and criteria of CC activities

OECD-DAC Rio markers definitions

Mitigation	An activity contributes to the objective 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.
Adaptation	An activity 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-DAC Rio markers examples of climate change activities by sectors

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 (OECD, 2011)

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 **Transport** **Industry** **Agriculture**	GHG emission reductions or stabilisation 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)

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 utilisation 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)

Annex 2. MDB joint approach definitions of climate change mitigation and adaptation

MDB joint approach definitions

Mitigation	Climate change mitigation promotes efforts to reduce, limit, or sequester greenhouse gas (GHG) emissions to reduce the risk of climate change. However, not all activities that reduce GHGs are eligible to be counted towards MDB mitigation finance. Mitigation finance is based on a list of activities that are compatible with low-emission pathways.
Adaptation	Climate change adaptation aims to lower the current and expected risks or vulnerabilities posed by climate change. For a project to be counted towards MDB adaptation finance, it must: • set out the climate vulnerability context of the project • make an explicit statement of intent to address climate vulnerability as part of the project, and • articulate a clear and direct link between the climate vulnerability context and the specific project activities.

MDB joint approach examples of mitigation activities by sectors (excerpt)

Category	Sub-category	Eligible activities
Waste and wastewater	Wastewater	Portion of treatment of wastewater that reduces methane emissions (only if net GHG emission reductions can be demonstrated and if not a compliance requirement to meet, for example, a performance standard or safeguard requirement)
	Solid waste management	• Waste management projects that capture or combust methane emissions • Waste-to-energy projects • Waste collection, recycling and management projects that recover or reuse materials and waste an inputs into new products or as a resource (only if net emission reductions can be demonstrated)
Transport	Urban transport modal change	• Urban mass transit • Non-motorised transport (bicycles and pedestrain mobility)
	Transport-oriented urban development	• Integration of transport and urban development planning (dense development, multiple land-use, walking communities, transit connectivity, and so on), leading to a reduction in the use of passenger cars • Transport and travel demand-management measures dedicated to reducing pollutant emissions, including GHG emissions (such as high-occupancy vehicle lanes, congestion charging or road pricing, parking management, restriction or auctioning of license plates, car-free city areas, low-emission zone)
	Inter-urban transport	• Railway transport ensuring a modal shift or freight and/or passenger transport from road to rail (improvement of existing lines or construction of new lines) • Waterways transport ensuring a modal shift of freight and/or passenger transport from road or air to waterways (improvement of existing infrastructure or construction of new infrastructure)
	Infrastructure for low-carbon transport	Charging stations and other infrastructure for electric vehicles, hydrogen or dedicated biofuel fueling
Low-carbon technologies	Products or equipment	Projects producing components, equipment or infrastructure dedicated to the renewable and energy efficiency sectors, or low-carbon technologies
	Research and development	Research and development or renewable energy or energy efficiency technologies, or low-carbon technologies

MDB joint approach examples of adaptation activities by sectors (excerpt)

Sector/topic	Sub-category/ topics	Possible vulnerability to climate change	Potential adaptation activities to address stated vulnerability
Waste and wastewater systems	Water supply	Increased risk of flooding of well fields leading to contamination	Well fields relocated away from floodplains, raised well heads
	Wastewater infrastructure/ management	Increased exposure to damage and storm-water overload due to coastal flooding and sea-level rise	Protection of wastewater infrastructure from increased flooding
	Water resource management	Reduction in river water levels and flows due to reduced rainfall	Improved catchment management planning and regulation of water abstraction
Crop production and food production	Primary agriculture and food production	Increased variability in crop productivity due to increased climate variability	Investments in research and development of crops that are more resilient to climate extremes and change
Other agricultural and ecological resources	Agricultural irrigation	Increasing drought, including seasonal droughts and shorter rainy seasons	Supplemental irrigation, multicropping systems, drip irrigation, levelling and other approaches and technologies that reduce the risk of large crop failures
	Forestry	Increased frequency of forest fires and pest or disease outbreaks	Improved management of forest fires and pest or disease outbreaks
	Livestock production	Decrease in forage quantity or quality due to the effects of increasing extreme weather events	Increased production of adequate fodder crops to supplement rangeland foraging
	Fisheries	Loss of marine/lake/river fish stocks due to changes in water flows, water temperatures, acidity levels or other climate-induced pressures	Adoption of sustainable fisheries and aquaculture techniques to compensate for the reduction in local fish supplies
	Ecosystems or biodiversity (including ecosystem-based flood-protection measures)	Drought leading to loss of wetlands and livelihoods or biodiversity	Establishment of core protected areas and buffer zones for sustainable use of biodiversity and water to meet livelihood needs in more extreme droughts
Industry, manufacturing and trade	Manufacturing	Historic standards for the key parts of equipment which are rendered inappropriate under new climate conditions	Design of climate-resilient equipment, such as more stable cranes for harbours in cyclone zones
	Food processing, distribution and retail	Increased risk of foodpoisoning and/or spoilage due to increased temperatures	Improved refrigeration or other changes in food processing and/or distribution that address more extreme heat
	Trade	Disruption of national trade due to climate-related disasters	Establishment of alternative trade routes in case of disruption to main route

Source: 2016 Joint Report on Multilateral Development Bank's Climate Finance

Annex 3. Standard CPEIR typology

Typology as used in the joint UNDP/World Bank supported CPEIR in Vietnam		
Pillar	**Category**	**Task**
Policy and Governance	PG1: A national framework for adaptation and risk reduction	PG1.1 Develop climate change adaptation guidelines and technical regulations PG1.2 Develop/adjust policy, planning and mechanism for climate change response and implementation across government, enterprises and communities PG1.3 Manage and monitor implementation of adaptation policies
	PG2: A comprehensive consistent national mitigation policy framework	PG2.1 Establish policy, tax and incentive structure for new and clean energy, energy efficiency and low GHG emission PG2.2 Develop/ adjust sectoral plan and coordinate implementation among departments, enterprises, and provinces PG2.3 Manage and monitor implementation of Mitigation policies
	PG3: Action Plan Impact Assessment at national, provincial, and sector level to translate policy and governance into activity and delivery	PG3.1 Action and Sector Plans PG3.2 Climate change Impact assessments PG3.3 Climate change Capacity building
	PG4: Legal framework to implement climate change policy (all elements of climate change/green growth policies)	PG4.1 Mitigation instruments PG4.2 Adaptation instruments PG4.3. Mitigation and Adaptation Instruments
	PG5: International cooperation, integration and diversification and strengthening of climate change investment effectiveness	PG5.1 Strengthen cooperation and partnership with international community on climate change issues PG5.2 Effective management and coordination of foreign and domestic investment
Scientific, Technical and Societal Capacity (ST)	ST1: Develop science & technology as a foundation for formulating policies, assessing impacts and identifying measure on climate change adaptation and mitigation	ST1.1 Information and database development ST1.2 Hydrometeorology and early warning system and climate change projection ST1.3 Biological & genetic resource strengthening ST1.4 Survey and assessment on climate change impacts ST1.5 Technology for energy efficiency and low GHG emission
	ST2: Improve awareness of climate change	ST2.1 Climate change awareness building in curriculums of primary to higher education establishments ST2.2 Awareness of climate change in diverse education and training initiatives for post-school aged earners

	ST3: Develop community capacity for responding to climate change	ST3.1 Support livelihood building for communities in the context of climate change ST3.2 Capacity across whole community in climate change response
Climate Change Delivery (CCD)	CCD1: Natural resources	CCD1.1 Coastal protection and coastal dykes CCD1.2 Saline intrusion CCD1.3 Irrigation CCD1.4 River dyke and embankments CCD1.5 Water quality and supply CCD1.6 Rural development and food security CCD1.7 Forest development CCD1.8 Fisheries & aquaculture CCD1.9 Biodiversity & conservation

Typology as used in the joint UNDP/World Bank supported CPEIR in Vietnam

Pillar	Category	Task
Climate Change Delivery (CCD)	CCD2: Resilient society	CCD2.1 Public health & social service CCD2.2 Education and Social Protection CCD2.3 Residential and city area resilience CCD2.4 Transport CCD2.5 Waste management and treatment CCD2.6 Disaster specific infrastructure CCD2.7 Strengthening disaster risk reduction
	CCD3: Enterprise and production	CCD3.1 Energy generation CCD3.2 Energy efficiency CCD3.3 Infrastructure and construction CCD3.4 Industry & trade CCD3.5 Tourism

Source: CPEIR Methodological Guidebook (UNDP, 2015)