GEF-8 REQUEST FOR CEO ENDORSEMENT/APPROVAL

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General Project Information

Project Title	
Strengthening the capacity of Turkmenistan to comply with the Enhanced Transparency Framework under the Paris Agreement.	
Region Turkmenistan	GEF Project ID 11070
Country(ies) Turkmenistan	Type of Project MSP
GEF Agency(ies): FAO	GEF Agency Project ID 743803
Project Executing Entity(s) Scientific Information Center of the Interstate Commission on Sustainable Development (SIC ICSD)	Project Executing Type CSO
GEF Focal Area (s) Climate Change	Submission Date 6/13/2024
Type of Trust Fund GET	Project Duration (Months) 36
GEF Project Grant: (a) 1,776,485.00	GEF Project Non-Grant: (b) 0.00
Agency Fee(s) Grant: (c) 168,765.00	Agency Fee(s) Non-Grant (d) 0.00
Total GEF Financing: (a+b+c+d) 1,945,250.00	Total Co-financing 1,325,400.00
PPG Amount: (e) 50,000.00	PPG Agency Fee(s): (f) 4,750.00
Total GEF Resources: (a+b+c+d+e+f) 2,000,000.00	
Project Tags CBIT: Yes NGI: No SGP: No Innovation: No	
Project Sector (CCM Only) Mixed & Others	

Taxonomy

Stakeholders, Type of Engagement, Partnership, Climate Change Adaptation, Climate Change, Focal Areas, Climate finance, Climate Change Mitigation, Financing, United Nations Framework Convention on Climate Change, Capacity Building Initiative for Transparency, Nationally Determined Contribution, Influencing models, Strengthen institutional capacity and decision-making, Gender Equality, Gender Mainstreaming, Sex-disaggregated indicators, Capacity, Knowledge and Research, Learning, Indicators to measure change, Capacity Development

Rio Markers

Climate Change Mitigation	Climate Change Adaptation	Biodiversity	Land Degradation
Principal Objective 2	Significant Objective 1	No Contribution 0	No Contribution 0

Project Summary

Provide a brief summary description of the project, including: (i) what is the problem and issues to be addressed? (ii) what are the project objectives, and if the project is intended to be transformative, how will this be achieved? iii), how will this be achieved (approach to deliver on objectives), and (iv) what are the GEBs and/or adaptation benefits, and other key expected results. The purpose of the summary is to provide a short, coherent summary for readers. (max. 250 words, approximately 1/2 page)

The Paris Agreement established an Enhanced Transparency Framework (ETF) designed to improve transparency and accountability in climate actions and support. Under the ETF, countries are required to submit biennial transparency reports (BTRs) that provide comprehensive information on national climate actions, including mitigation, adaptation, and support received or provided. These reports, collected using improved methodologies and subject to peer review, aim to build mutual trust and confidence in global climate actions and foster an environment where countries can learn from each other's best practices.

This project aims to provide technical and organizational support to the Government of Turkmenistan to address any gaps and barriers related to compliance with the ETF requirements. This includes fostering inter-sectoral coordination and ensuring the participation of national stakeholders. The support provided by the project is intended to be catalytic in transforming existing structures, addressing challenges related to national institutional frameworks, enhancing data and information management systems, and building familiarity, technical capacity, knowledge, and skills needed for the transition to the ETF.

The project's activities will offer the Government counterparts a structured framework and additional expert support to achieve sustainable capacity development for transparency. Within this context, the project aims to strengthen national institutional arrangements and information management systems to support ETF compliance and formulate Long-term Low Emissions and Development Strategies (LT-LEDS) (Component 1). It also seeks to enhance national technical capacity for preparing GHG inventories and monitoring and reporting on NDC climate change mitigation actions (Component 2). Additionally, the project aims to build national technical capacity to monitor and report on NDC climate change adaptation actions, as well as loss and damage (Component 3). Proper monitoring and evaluation will be conducted to ensure lessons learned are documented and disseminated effectively, so future efforts build on the results delivered by the project (Component 4).

This project is expected to contribute to the implementation of priority NDC actions and support low carbon economic growth in the long term. It is anticipated that 450 people will benefit from the GEF-financed project, with a target of 60% men and 40% women.

Project Description Overview

Project Objective

Strengthening Turkmenistan's national capacities to meet the enhanced transparency framework (ETF) for climate change mitigation and adaptation actions and support received for the sectors covered by nationally determined contributions (NDCs).

Project Components

Component 1: Strengthening national institutional arrangement and information management system to support the ETF compliance, and Long-term Low Emissions and Development Strategies (LT-LEDS) formulation.

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing ($)	Co-financing ($)
620,454.00	325,000.00

Outcome:

1.1 Enhancing national institutional capacities for ETF compliance, and LT-LEDS formulation.

1.2 Enhancing information management system to support ETF compliance, and LT-LEDS formulation.

1.3 Enhancing national capacities to track climate finance.

1.4 Enhancing national capacity and knowledge on modalities, procedures, guidelines (MPGs), and reporting formats of the ETF.

Output:

Output 1.1.1 Established ETF roadmap, action plan and institutional arrangement for ETF compliance, and LT-LEDS formulation.

Activity 1.1.1.1: Conducting and disseminating technical, institutional, and data gaps assessment to support the ETF requirement and LT-LEDS formulation.

Activity 1.1.1.2: Conducting workshops and consultations on gender sensitive gap assessment prepared under activity 1.1.1.1.

Activity 1.1.1.3: Roadmap and Action Plan for ETF (RAPETF) of Turkmenistan are prepared for ETF compliance and LT-LEDS formulation.

Activity 1.1.1.4 Consultation (National Consultation, and workshops) to validate and endorse the RAPETF.

Activity 1.1.1.5: Institutional arrangements and coordination procedures are developed based on the existing system and RAPETF; including Identification and formalization of the institutional focal persons and thematic area Technical Working Groups (TWGs) (e.g. GHG inventory by sectors, Mitigation, Adaptation, Climate finance, etc.).

Activity 1.1.1.6 National Consultation on Institutional arrangements and coordination of its validation.

Activity 1.1.1.7 Formalizing the Institutional arrangements and coordination through ministerial decree and government endorsement.

Output 1.1.2 Formally established institutional arrangements and coordination procedures, developed and endorsed Terms of Reference (ToR) for the Biennial Transparency Report (BTR) preparation and submission, enhanced stakeholders technical capacity for the Article 6 of the Paris Agreement.

Activity 1.1.2.1 Formal establishment of the institutional arrangements and coordination procedures for the BTR preparation and submission with a particular focus on stakeholders' involvement and their inclusive participation for the Article 6 of the Paris Agreement.

Activity 1.1.2.2 Developing and endorsing Terms of Reference (ToR) for the BTR preparation and submission and supporting the Article 6 of the Paris Agreement by involving relevant stakeholders; ensuring balanced gender representation.

Activity 1.1.2.3 Technical capacity building of the stakeholders focusing on the Article 6 of the Paris Agreement.

Activity 1.1.2.4 Preparing gender-sensitive knowledge materials on the Article 6 of the Paris Agreement using local language to uplift technical knowledge of stakeholders.

Output 1.2.1: Established information management system to support ETF compliance focused on GHG inventory, NDC tracking & progress, Climate Change Adaptation, Climate Finance, and LT-LEDS formulation.

Activity 1.2.1.1: Gender-sensitive assessment of technical, institutional, and data gap and needs to develop the information management system and its dissemination.

Activity 1.2.1.2: Roadmap and action plan for an information management system to support the ETF compliance, and LT-LEDS formulation with gender sensitive stakeholder mapping and definition of roles and terms of reference (ToRs) are prepared and endorsed.

Activity 1.2.1.3: National Consultation on Roadmap and action plan for information management system developed under Activity 1.2.1.2: to validate it.

Activity 1.2.1.4: Operational integrated information management system to support ETF compliance, and LT-LEDS formulation.

Activity 1.2.1.5: Developing gender-sensitive knowledge materials on developed information management system using local language to raise stakeholder awareness.

Output 1.3.1 Enhanced stakeholder capacity for reporting climate finance (domestic and international).

Activity 1.3.1.1 Conduct a capacity gap assessment on climate finance and support received reporting based on the existing system.

Activity 1.3.1.2 Developing guidelines and action plans for reporting national climate finance information related to NDC actions at national, sub-national, program, and project levels.

Activity 1.3.1.3 Conducting gender-sensitive training on tracking climate finance following the Training of Trainers (ToT) model involving NGOs and private sector agents.

Activity 1.3.1.4 Developing gender-sensitive knowledge materials on MPGs of ETF reporting for climate finance using local language to raise stakeholder awareness.

Output 1.4.1 Enhanced stakeholder capacity and knowledge of MPGs and ETF reporting.

Activity 1.4.1.1 Conducting technical capacity-building training workshops on MPGs of ETF reporting following the ToT model.

Activity 1.4.1.2 Developing gender sensitive knowledge materials on ETF requirements, processes, and procedures using local language to raise stakeholder awareness.

Activity 1.4.1.3 Conducting technical capacity building training to formulate the National Inventory based on the Common Reporting Tables (CRT) for BTR.

Component 2: Strengthening national technical capacity for GHG inventory preparation and monitoring and reporting NDC climate change mitigation actions.

Component Type	Trust Fund
	GET
GEF Project Financing ($)	Co-financing ($)
482,866.00	159,910.00

Outcome:

Outcome 2.1: Enhancing technical capacity for reporting and data collection, methodologies, guidelines, and protocols, including quality assurance and quality control (QA/QC) processes and full integration of the sectoral data on GHG emissions inventory for BTR reporting.

Output:

Output 2.1.1: Enhanced technical capacity for estimating and reporting GHG emissions.

Activity 2.1.1.1 Enhancing GHG emission estimations through gender-sensitive training on 2006 IPCC Guidelines, 2019 refinements and reporting for Energy, Industrial Processes and Product Use (IPPU), and Waste sectors following the ToT model.

Activity 2.1.1.2 Enhancing technical capacity on spatial analysis of GHG emission through gender-sensitive training on land-use change analysis following the ToT model.

Activity 2.1.1.3 Enhancing technical capacity through gender-sensitive training on GHG inventory preparation of AFOLU sectors based on 2006 IPCC Guidelines, and 2019 refinements following the ToT model.

Activity 2.1.1.4 Enhancing technical capacity on spatial analysis and GHG inventory preparation based on 2006 IPCC Guidelines for the students of S.A. Niyazov Agriculture University, Dashoguz Agriculture Institute and Magtymguly Turkmen State University.

Activity 2.1.1.5 Developing knowledge materials on MPGs of ETF reporting using Common Reporting Tables of the BTR for GHG inventory and tracking NDC actions on climate change mitigation using the local language.

Activity 2.1.1.6 Analysis of situation on methane emissions in Turkmenistan.

Activity 2.1.1.7 Learning from the global experience of 'best practices' in reducing methane emissions and issues related to the Global Methane Pledge.

Activity 2.1.1.8 Strengthening national capacity for inventory of the methane emissions in priority sectors.

Activity 2.1.1.9 Conducting a gender-sensitive awareness raising campaign on methane emissions reduction.

Component 3: Strengthening national technical capacity to monitor and report NDC climate change adaptation actions, as well as loss and damage.

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing ($)	Co-financing ($)

415,667.00	550,000.00

Outcome:

Outcome 3.1: Strengthened capacity to monitor, evaluate, and report on climate change impacts, vulnerabilities and risks, and adaptation-related activities, as well as loss and damage; including capacity for assessing gender differentiated impacts.

Output:

Output 3.1.1 Enhanced national technical capacity for monitoring and reporting NDC climate change adaptation actions.

Activity 3.1.1.1 Conduct a gender sensitive capacity gap assessment on the existing system for M&E of climate change impacts, risks, and vulnerabilities of NDC prioritized sectors.

Activity 3.1.1.2 National consultation on conducted capacity gap assessment under Activity 3.1.1.1.

Activity 3.1.1.3 Developing guidelines and action plans on M&E of NDC adaptation actions, at national, sub-national, program, and project levels.

Activity 3.1.1.4 Organizing gender-sensitive training on tracking NDC climate change adaptation actions following the ToT model involving NGOs and private sectors.

Activity 3.1.1.5 Developing gender-sensitive knowledge materials on MPGs of ETF reporting for adaptation, using the local language.

Output 3.1.2 Enhanced national technical capacity for monitoring and reporting loss and damage

Activity 3.1.2.1 Supporting the government to establish an Inter-agency Working Group (IWG) and associated ToR on Loss and damage to harmonize existing national methodologies for assessing loss and damage.

Activity 3.1.2.2 Preparation of a background document and knowledge materials on current institutional framework and existing methodologies on loss and damage.

Activity 3.1.2.3 Development of an updated version of the FAO loss and damage methodology for the NDC sectors focusing on Turkmenistan

Activity 3.1.2.4 Organizing gender-sensitive training on developed methodologies under 3.1.2.3

Activity 3.1.2.5 Organizing Knowledge exchange tour overseas for hands on experience on climate change adaptation, loss and damage assessment in drought prone areas.

Activity 3.1.2.6 Developing a protocol for collecting, verifying, transmitting, aggregating data on loss and damage for transparent reporting and integrating with the output 1.2.1.

Component 4. Monitoring and evaluation

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing ($)	Co-financing ($)
100,000.00	170,000.00

Outcome:

Outcome 4.1: Monitoring and evaluation of global environmental benefits (GEBs).

Output:

Output 4.1.1: Mid-term review and final evaluation conducted, in addition to the preparation of periodic progress reports.

Component Balances

Project Components	GEF Project Financing ($)	Co-financing ($)
Component 1: Strengthening national institutional arrangement and information management system to support the ETF compliance, and Long-term Low Emissions and Development Strategies (LT-LEDS) formulation.	620,454.00	325,000.00
Component 2: Strengthening national technical capacity for GHG inventory preparation and monitoring and reporting NDC climate change mitigation actions.	482,866.00	159,910.00
Component 3: Strengthening national technical capacity to monitor and report NDC climate change adaptation actions, as well as loss and damage.	415,667.00	550,000.00
Component 4. Monitoring and evaluation	100,000.00	170,000.00
Subtotal	**1,618,987.00**	**1,204,910.00**
Project Management Cost	157,498.00	120,490.00
Total Project Cost ($)	**1,776,485.00**	**1,325,400.00**

Please provide Justification

PROJECT OUTLINE

A. PROJECT RATIONALE

Describe the current situation: the global environmental problems and/or climate vulnerabilities that the project will address, the key elements of the system, and underlying drivers of environmental change in the project context, such as population growth, economic development, climate change, sociocultural and political factors, including conflicts, or technological changes. Describe the objective of the project, and the justification for it. (Approximately 3-5 pages) see guidance here

1. *Country context*: Turkmenistan is a landlocked country located in the western part of Central Asia, bordered to the north by Kazakhstan, to the northeast and east by Uzbekistan, to the southeast by Afghanistan and to the south by Iran. In the west, the natural border is the Caspian Sea, through which Turkmenistan borders with Azerbaijan. The area of Turkmenistan is 491.21 thousand square

km. The territory stretches 1,100 km from the west to the east and 650 km from the north to the south.

2. *Demography*. The population of the country is more than 6 million people and it is growing by 1.4% per year [1]. Urbanization is also increasing, with an urban population of 54% of the total population[2]. There are 51 cities in Turkmenistan, of which 11 are constituted as districts (etraps); 62 villages, 605 gengeshliks (rural municipalities) and 1719 rural settlements.
3. *Socio-economic conditions:* Turkmenistan is a country with a developing economy, with an annual stable growth rate of the gross domestic product (GDP) of 6-8% in recent years. High growth rates have become characteristic of the country's dynamically developing economy. In 2012–2020 the volume of GDP increased by 59%. There have been changes in the structure of GDP: the share of the industry in 2020 amounted to 28%; agriculture 11.5%; construction 9.5%; transport and communications 10.7%; trade and nutrition of the population 18.7%; other sectors -21.6%.
4. Turkmenistan's economy depends heavily on the production and export of natural gas, oil, petrochemicals, and, to a lesser degree, cotton, wheat, and textiles.
5. Energy sector: The country ranked 4th in the world for natural gas reserves as of 2020 . Turkmenistan's natural gas reserves are estimated at 50 trillion cubic meters . Turkmenistan extracted 8.7 million tonnes of oil and condensate in 2020. Production of liquid petroleum gas totaled 231,000 tonnes . Turkmenistan produced 2.12 million tons of oil and more than 9 billion cubic meters of natural gas in the first nine months of 2022. The country has 13 electrical power plants, including 14 steam-driven, 15 gas-powered, and 3 hydroelectric units.
6. *Water resources*: Water is a scarce resource and is unequally distributed across Turkmenistan. There are few rivers, the largest being Amu-Darya, with little to no surface flows across most of the desert landscapes. The country is highly reliant on irrigation-fed agriculture, and 92% of all available surface water in the country is used by the agriculture sector[3].
7. *Agriculture*: Approximately 66% of the land resources are utilized for agriculture purposes, 27% are kept as state reserve forests, and 7% of land is used for other purposes. The soils in Turkmenistan are characterized by a very low humus content, which is due to the insignificant amount of annual precipitation and strong heating of the surface. This limits the development of vegetation. The total area of agricultural land as of 1 January 2019 was 39.7 million hectares, of which pastures account for 95.6%. The land area of the reclamation fund suitable for development is 17 million hectares. Over 1.7 million ha of the territory of Turkmenistan is irrigated land. However, due to proximity of irrigated soils to water bodies and close occurrence of mineralized groundwater, these soils are also prone to salinization. In the foothill areas of the country, where more precipitation falls, chernozem soils develop under a relatively dense grass cover. In the mountains, with a change in altitude, there is a vertical belt of soils, ranging from light gray soils to brown soils in the upper part.
8. The main areas of irrigated agriculture in Turkmenistan are the Amudarya, Murghab, Tejen and Atrek oases, as well as the Pre-Kopetdag foothill plain. Of the total area of the country's territory 63.4% account for land used for agricultural purposes, state reserve land and forest fund -29.2%, other land uses – 6.9%.
9. Due to its geographical location, Turkmenistan plays a key role in the region in preserving global biodiversity and maintaining biosphere functions. The biological diversity of the country includes at least 20 thousand species, including more than 7 thousand plant species and about 13 thousand species of animals (of which more than 720 are vertebrates). In addition, the biodiversity of Turkmenistan is characterized by high rates of autochthonous development of flora and fauna. All this diversity is distributed across various ecosystems – plain-desert (about 80% of the country's territory), mountain, river, lake, sea, coastal-marine and anthropogenic developed.
10. Since the process of climate change will proceed at a more accelerated pace than the adaptation of various representatives of the plant and animal world to it, as well as due to

the presence of associated impact factors and limited adaptation options, many ecosystems (especially forest, mountain systems) are quite vulnerable to the effects of climate change.

11. The current stage of the socio-economic development of Turkmenistan is characterized by the implementation of large-scale reforms aimed at modernizing the economy to accelerate the transfer of the entire national economic complex to a new industrial and innovative development path. The main goal of the strategy of industrial and innovative development of Turkmenistan is formation of a modern structure of the industry based on innovations aimed at sustainable development. For this purpose, the economy is diversified, measures are being taken to ensure the competitiveness of products in the domestic and foreign markets, the main production sectors are being modernized, legal, organizational and economic measures and conditions necessary for its transfer to an industrial-innovative development path are being implemented.
12. Structural changes are taking place: new manufacturing industries are being created, modern high-tech industrial complexes, plants and factories, processing industry facilities are being put into operation, which are designed to produce domestic competitive products that meet international quality standards. The key areas of the new economic strategy are modernization, diversification and general liberalization of the economy, combination of elements of the market and state regulation. Along with the priority development of the fuel and energy and agro-industrial complex, chemical industry, transport and information-communication infrastructure, significant investments are directed to the social, scientific, and educational spheres.
13. Large-scale reforms in the social sphere are carried out in accordance with sectoral medium-term development programs. The Program of the President of Turkmenistan for the socio-economic development of the country for 2012-2016, 2019-2025 and the National Program for the Socio-economic Development of Turkmenistan for the period 2011-2030 became the benchmark in development of these programs. Turkmenistan is currently characterized as an industrial and investment country with developing infrastructure. In 2007– 2020, the volume of investments in fixed assets increased by 7.8 times, while the state investments account for the bulk of it.
14. *Climate:* Turkmenistan is characterized by one of the most severe climatic conditions in the Central Asian region. The climate is sharply continental, dry, with a predominance of very high air temperatures and very low precipitation. Summers are hot and dry and last from May to September, while winters are generally mild and dry. Most of the rainfall occurs between January and May; rainfall throughout the country is low, with an average annual value of 300 mm in the Kopetdag to 80 mm in the north-west.

Climate change impacts and vulnerability

15. *Climate change impact, and adaptation*: The ND-GAIN Country Index summarizes a country's vulnerability to climate change and other global challenges in combination with its readiness to improve resilience. It aims to help governments, businesses and communities better prioritize investments for a more efficient response to the immediate global challenges ahead.

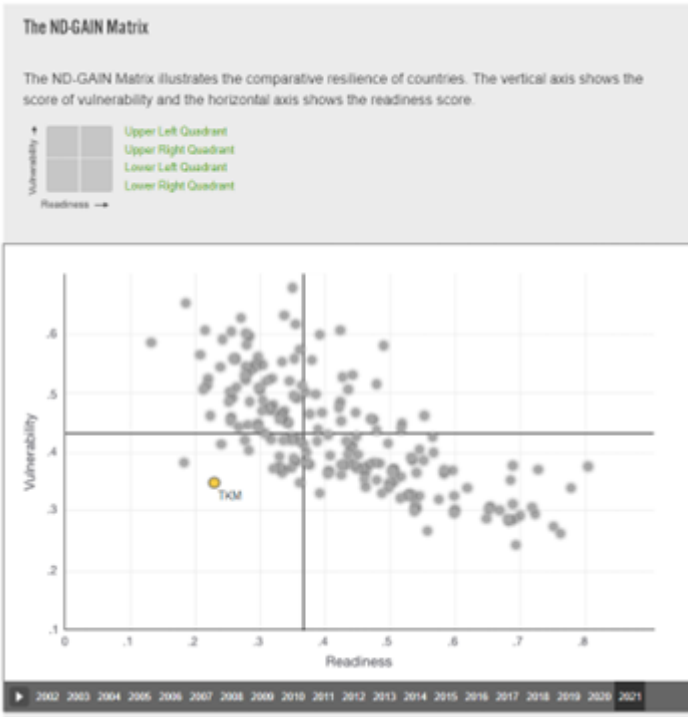
Turkmenistan

VIEW PROFILE

ND-GAIN Country Index rank	Vulnerability / Readiness
117	
Score: 44.2	Vulnerability 0.349
	Readiness 0.234

Vulnerability composition

Readiness composition



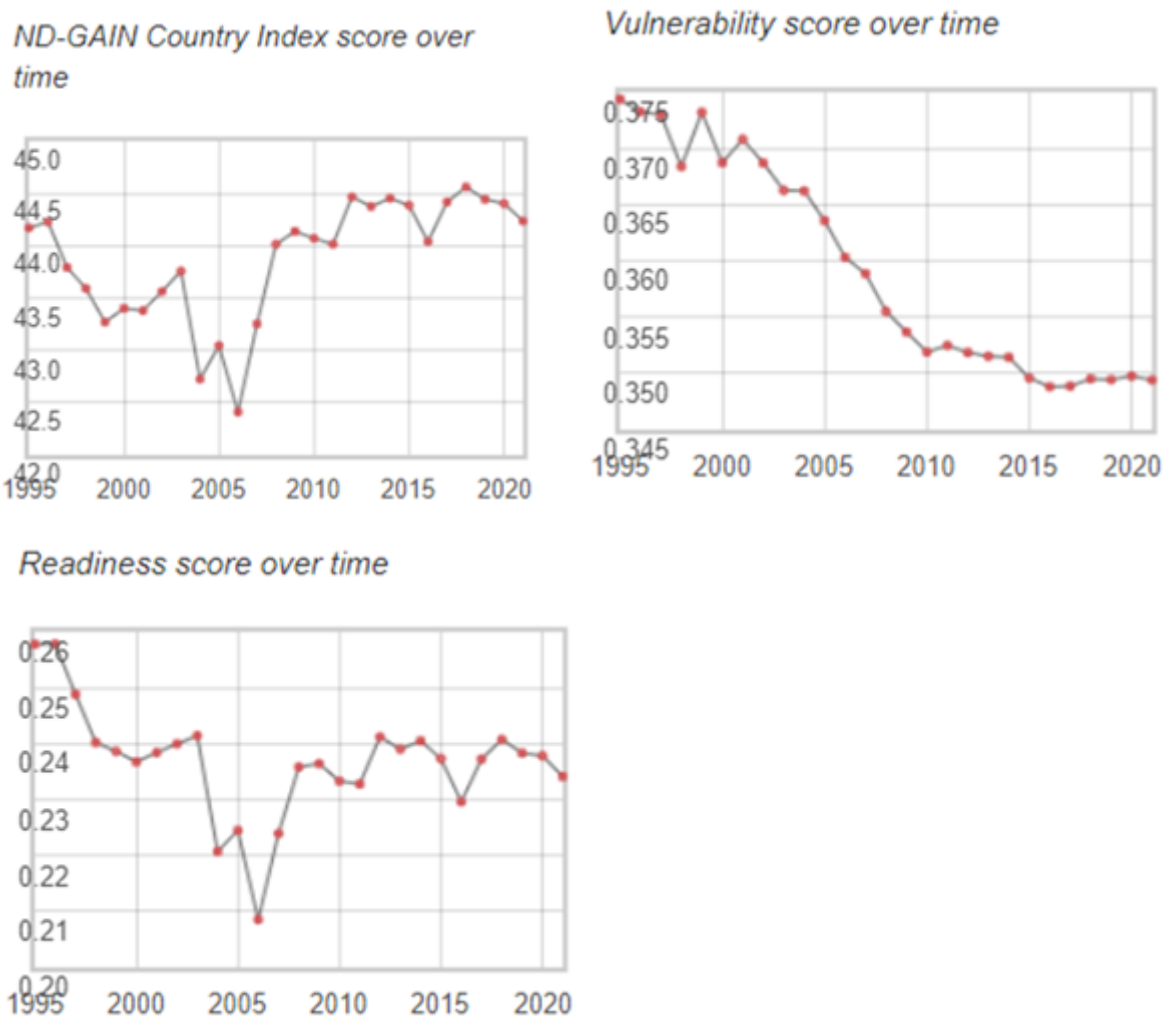


Figure 1: Demographic ND-GAIN country index rank for Turkmenistan[4][1]

16. For assessing likely climate change and its possible consequences in Turkmenistan, regional climatic scenarios have been developed for the territory of the country. According to these scenarios, an increase in ambient air temperature is expected throughout the territory of Turkmenistan, as well as a decrease in precipitation. Calculations show an increase in temperature by 2100 from 2-3°C (optimistic scenario) to 6-7°C (pessimistic scenario) relative to the 1990 baseline norm (2nd National Communication).

17. The expected increase in air temperature and decrease in annual precipitation will have a possible significant impact on many aspects of the country's socio-economic development in the future. Therefore, adaptation to climate change is one of the main priorities of the National Strategy of Turkmenistan on Climate Change and part of this NDC.

18. The impact of climate change on economic sectors is expressed through the impact on them of various natural phenomena. Extreme hydrometeorological phenomena intensifying because of the climate change cause significant damage to economic sectors and livelihoods of the population around the world. In the framework of the preparation of the Third National Communication of

Turkmenistan under the UNFCCC (2012–2015), the climate change risk assessment was carried out in Turkmenistan for the period from 1950 to 2010, which describes the high vulnerability of Turkmenistan to climate change. This vulnerability is largely related to the increase, frequency, and intensity of such extreme hydrometeorological phenomena as drought, hail, storm winds, frosts, heat waves, floods and mudflows (3rd National Communication).

19. The greatest threat (risk) to the socio-economic well-being of the country is posed by drought, the appearance of which is caused by high air temperatures and a shortage of water resources. Currently, there is a noticeable tendency to an increase in the frequency of dry years of the main rivers of Turkmenistan – the Amu Darya and Murghab. Climate warming will become an additional risk factor for the development of hydrological drought and desertification, negatively affecting water resources and accordingly, agriculture.

20. *Key climate trends: temperature*. A warming trend has been observed in all regions of Turkmenistan in recent decades. The average temperature across the country rose by approximately 2°C between 1950 and 2010, equivalent to warming of approximately 0.3°C per decade. The extent of this warming was subject to considerable regional variation, however. In general, warming has been more pronounced in central and eastern areas of the country, and temperature increases have been slightly less on the Caspian Sea coast. The rise in average temperature between 1950 and 2010 ranged from 1.1°C in Birata in the centre of the northern border, to 1.45°C in Balkanabat in the west, 2.05°C in Bayramali in the southeast, and 2.4°C in Kerki in the far east. Daily fluctuations in temperature have also increased in Turkmenistan in recent years, and temperature extremes have risen sharply, particularly daily minimum temperatures.

21. Climate change modeling indicates significant increases in temperature and reductions in rainfall. Temperatures are expected to increase by 2 C by 2040, with precipitation declining across all agroecological zones. The observations data at the hydrometeorological stations over 52 years (1960–2012) of Balkanabat, Bayramali, Kerki, and Darganata of Turkmenistan show that the air temperature in Balkanabat increased by 1.45°C, Bayramaly by 2.05°C, Kerki by 2.4°C, in Darganata by 1.1°C [5]. These trends will be accompanied by increased frequency and severity of climate-induced disasters (drought, floods, strong winds) [6]. The National Strategy of Turkmenistan on Climate Change identifies vulnerable sectors, which are agriculture, water, health care, soils and land resources, ecosystems and forestry, and hydrometeorological activities.

22. *Key climate trends: Precipitation*: Historical changes in levels of precipitation for Turkmenistan are far less clear than for temperature. Average annual precipitation in the country has risen slightly during the period 1901–2015, albeit without a statistically significant increase. However, as a result of other climatic shifts, notably evapotranspiration trends, drought indices have increased in Turkmenistan. Inter-annual variability in precipitation is also influenced by El Niño Southern Oscillation (ENSO). The total annual rainfall is 191 mm on average and 96% of the country is characterized as arid land. Drought is a semi-permanent condition in the country, making it the aridest of the five Central Asian countries [7].

23.*Agriculture sector impact and vulnerability*: Climate change could influence agrifood systems via direct and indirect effects on crop growth processes. Direct effects include alterations to carbon dioxide availability, precipitation and temperatures. Indirect effects include through impacts on water resource availability and seasonality, soil organic matter transformation, soil erosion, changes in pest and disease profiles, the arrival of invasive species, and decline in arable areas due to the salinization of coastal lands and desertification. On an international level, these impacts are expected to damage key staple crop yields, even on lower emissions pathways. Tebaldi and Lobell (2018) [8] estimate 5% and 6% declines in global wheat and maize yields respectively even if the

Paris Climate Agreement is met and warming is limited to 1.5°C. Shifts in the optimal and viable spatial ranges of certain crops are also inevitable, though the extent and speed of those shifts remains dependent on the emissions pathway.

Greenhouse gas (GHG) emissions, climate monitoring and action

24. *GHG emissions*: In terms of greenhouse gas emissions, Turkmenistan is part of the carbon-intensive economies of the world with higher average per capita incomes. The main goal of the national actions of Turkmenistan to limit emissions is the development and implementation of urgent measures in priority sectors to mitigate the current and anticipated consequences of climate change to timely address the tasks arising from decisions of the UN Framework Convention on Climate Change and the Paris Agreement, as well as the development of measures for intensive reduction of greenhouse gas emissions. This requires using the longterm results of the national inventory of greenhouse gases, which were carried out in accordance with the relevant documents of the UNFCCC and the guidelines of the Intergovernmental Panel on Climate Change (IPCC).

25. The first national Greenhouse Gas (GHG) Inventory in Turkmenistan was carried out in 1998 in the framework of the preparation of the First National Communication on Climate Change based on 1994 data. Later, in 2006–2009, the GHG inventory was carried out during the preparation of the Second National Communication on Climate Change based on the data of 1995–2004 and the Third National Communication on Climate Change based on the data of 2005–2010.

26. *Nationally Determined Contribution (NDC).* The NDC of Turkmenistan is based on numerous national strategic documents and programs including: the National Strategy of Turkmenistan on Climate Change (new edition, NSTCC, 2019), 'Programs for the socio-economic development of Turkmenistan for the period 2011-2030', the National Program of the President of Turkmenistan for the transformation of social and living conditions of the population of villages, settlements, cities in districts and district centers for the period up to 2020 in a new edition, the National Strategy for the Development of Renewable Energy in Turkmenistan to 2030, the State Program on Energy Saving for 2018-2024, the Program of the President of Turkmenistan on the socio-economic development of the country for 2019–2025. The NDC was primarily developed on the basis of the updated National Strategy of Turkmenistan on Climate Change and reflects the results of climate change mitigation measures, which were discussed with all national stakeholders during the period 2019–2021.

27. Three National Communications on Climate Change were submitted by Turkmenistan to the UNFCC in 2000, 2009 and 2015 respectively. Based on the UNFCCC recommendations and considering the specific climatic conditions in Turkmenistan the ―National Strategy of Turkmenistan on Climate Change was developed and approved by the Decree of the President of Turkmenistan dated June 15, 2012. On September 23, 2019, new edition of the National Strategy of Turkmenistan on Climate Change was approved by the Decree of the President of Turkmenistan. The purpose of the National Strategy of Turkmenistan on Climate Change is to ensure the sustainable development of Turkmenistan through mitigation of climate change impact; contribution to the socio-economic development of the country; preparing the country's economy for the possible negative consequences of climate change; fostering economic, food, water and environmental security of the state. Currently, with the support of the United Nations Environment Programme (UNEP) and UNDP the work is underway for the development of Turkmenistan's Fourth National Communication on Climate Change.

28. The country has submitted the Intended Nationally Determined Contributions (INDC) to the UNFCCC Secretariat on September 2016 [9]. The Government of Turkmenistan approved the updated Nationally Determined Contributions for submission to the Council of the UNFCCC. The

updated NDC [10] represents a 20% reduction in its GHG emissions in 2030 compared to the BAU scenario, relative to 2010 emissions covering Energy, Agriculture, Industrial processes and product use, and the Waste sector [11]. The country committed to a mitigation contribution type 3 (GHG goal intensity target) that focused on a specific GHG emissions target per unit of GDP. Additionally, it was established that “with some financial and technological support provided by developed countries, Turkmenistan could achieve zero growth in emissions and even reduce them up to 2030.'

29. *Third National Communication.* The strategic document reflected actions to resolve climate change problems as well as new approaches in Turkmenistan to mitigate global warming. Sectors and areas most vulnerable to climate change were identified: agriculture, water management, healthcare, soils & land resources, natural ecosystems and forestry. A list of adaptation measures has been proposed for each sector to enhance resilience to climate change impacts. Analysis of national and sectoral programs and measures was undertaken (Chapter 3 of the 3rd NC).

30. *Fourth National Communication and the Biennial Update Report on the UNFCCC* (under development). These strategic national documents are being developed with the support of the United Nations Development Programme (UNDP) in cooperation with the United Nations Environment Program (UNEP) and coordinated by the UNDP project 'Sustainable Cities in Turkmenistan: Integrated Green Urban Development in Ashgabat and Avaza'. The preparation of the Fourth National Communication will promote, inter alia, developing a national strategy to reduce greenhouse gas emissions; assess vulnerability and adaptation to climate change; draft a strategy to mitigate climate change; build and strengthen the institutional, scientific-technical, informational and human capacities.

31. *Climate finance initiatives*: The implementation of measures to adapt to climate change and mitigation in Turkmenistan requires significant financial and technical resources, as well as increasing the capacity of government decision-makers. The necessary financial resources are taken into consideration in state, sectoral and regional programs of the country's socio-economic development. At present, most of the funds for climate change financing in Turkmenistan are allocated from the state budget. The Ministry of Foreign Affairs of Turkmenistan and the Ministry of Agriculture and Environmental Protection of Turkmenistan are responsible for coordinating all international environmental projects and actively cooperate with international partners in their implementation.

32. Most of the funds are being received from the GEF and the AF and used for the projects aimed at reducing greenhouse gas emissions, minimizing damage from droughts and adaptation to climate change in the field of ensuring reliable supply of drinking water to the population, animal husbandry and improving the energy efficiency of water supply systems. The total amount of climate financing allocated to Turkmenistan within the framework of GEF projects amounted to 15.19 million dollars. GEF supports the efforts of projects in the country to improve the energy efficiency of irrigation systems, contributes to reducing water consumption and improving the reliability of water supply to remote communities of Turkmenistan in arid Lebap and Dashoguz regions. To this end, drip irrigation, rainwater harvesting and water consumption metering systems are being introduced. On a bilateral basis, Turkmenistan is supported by the European Union, the USA, and Germany. Thus, receiving funding from Germany, the Sustainable Forest Management and Pasture Project implements measures to adapt and mitigate the effects of climate change through the introduction of a modern ecosystem approach and integrated forest management (OECD 2016).

33. In addition, Turkmenistan actively participates in regional climate projects, such as CAMP4ASB, Smart Waters and others, where technical and other assistance is provided to improve

climate services and improve water management and accounting. Turkmenistan began active cooperation with the Green Climate Fund (GCF) in 2020 on the so-called GCF Readiness project supported by the country office of the Regional Environmental Center for Central Asia (CAREC). The project 'Strengthening the capacity of Turkmenistan and support in the development of country programs and regional actions in addressing issues related to climate change' implemented by CAREC is the first step of the state in working with the GCF, which will allow to establish processes for accessing to its funds. In 2021, the GCF allocated funds for a new project Developing a National Adaptation Planning Process in Turkmenistan.

Table 1: An overview of recent National Projects focusing on change mitigation and adaptation and linkages with proposed CBIT project.

Relevant Projects that are implemented	Linkages with proposed CBIT project
Title: Improving the capacity of Turkmenistan to access climate finance through capacity building and strategic frameworks. Funded by: GCF	The CBIT project will engage with this project in order to build on the coordination mechanisms, institutional arrangement, capacity building on climate finance issues. Namely, the developed climate finance tool will be disseminated through CBIT project.
Title: Developing a National Adaptation Planning Process in Turkmenistan. Funded by: GCF	The CBIT project will engage with this project in order to build on the coordination mechanisms, institutional arrangement, capacity building on adaptation planning issues, and monitoring framework developed by this project.
Title: Developing National Capacity of Turkmenistan through Improving Regulatory Environment towards Energy Efficient and Sustainable Building Sector. Funded by: GEF	The CBIT project will engage with this project in order to build on the coordination mechanisms, institutional arrangement, capacity building on mitigation planning issues.
Title: Conservation and Sustainable Management of Land Resources and High Nature Value Ecosystems in the Aral Sea Basin for Multiple Benefits. Funded by: GEF	Lessons learned and experiences from the project will be considered.
Title: Integrated Green Urban Development in Ashgabat and Awaza Funded by: GEF	Lessons learned and experiences from the project will be considered.

34. The consultation process during the project preparation, as well as document such as the NC2 and NC3 identifies a number of gaps for the climate action and reporting of Turkmenistan such as the need for:

- Capacity building related to legislative and institutional structure to enhance the climate change-related activities in the country.
- Institutional capacity building to ensure proper financial support.
- Weak coordination between ministries, and departments related to cooperation on climate change-related decision-making.
- Need to establish a permanent functioning structure to deal with climate change issues.
- Technical capacity building of the officials and organization to prepare national communications and GHG inventory preparation.
- Lack of data and information management system for data sharing.
- Improving the methods of measurement.
- Need to improve the system of assessment of GHG emissions and sinks.
- Developing the national GHG emission factors (EF).
- Lack of technical capacity related to GHG emission measurement, and modeling of emission reduction.

- Lack of collaboration with the international community for technical capacity building.
- Lack of institutional coordination for integrating climate change issues into national planning and development programs.
- Lack of permanent institutional framework.
- Lack of knowledge and awareness related to climate change at the decision makers level.

35. Therefore, it is clear that the country has low capacity concerning the ETF of the Paris Agreement. Without the proposed project, such capacity gaps will likely persist. The objective of the proposed project is to 'strengthen national institutional and technical capacities of Turkmenistan for tracking the NDC's climate actions for biennial transparency report (BTR) submission, and supporting the LT-LEDS formulation.' Currently, Turkmenistan does not have a legal and institutional framework that manages mitigation, adaptation, and climate finance for BTR preparation in a holistic, integrated, and comprehensive manner. There is a disconnect between national strategies, planning, institutional coordination, and technical capacity; and there is no mechanism for monitoring and reporting the NDC actions on climate change mitigation, adaptation, and climate finance. In addition, tracking the NDC actions are further hindered by the inadequate use and availability of evidence-based methodologies and toolkits. Therefore, the proposed project will address the following barriers and gaps:
    - Lack of institutional capacity aimed at coordination and transparent implementation of activities (e.g. national GHG inventories, monitoring and reporting mitigation and adaptation actions, as well as climate finance, methodological issues related to climate change mitigation and adaptation).
    - Lack of national technical capacity and knowledge related to climate change mitigation actions, adaptation actions, climate finance, and ETF reporting.
    - Lack of data and information management system for transparent monitoring of the progress of climate change-related actions.

36. Without the proposed CBIT project, the national, as well as international aspiration of enhancing climate transparency, will be difficult to achieve. As one of the climate change-vulnerable countries, existing technical and institutional capacity barriers affect the execution of priorities for visible NDC actions. Therefore, Turkmenistan needs to focus on defining and implementing coordinated actions focusing on the ETF requirement of the Paris Agreement, and the systematization of tracking NDC actions. This project will give this opportunity to the country.

37. The relevant stakeholders for the proposed CBIT project include government institutions, government-owned companies, scientific and non-governmental organizations, the private sector, international organizations, and international financial institutions operating at national and sub-national levels in Turkmenistan. Each of the identified stakeholders plays an important role in the project implementation provided in the Stakeholder Engagement Plan and the Stakeholder Engagement Matrix. The Ministry of Environmental Protection of Turkmenistan plays the leading role in the proposed project implementation by liaising with other inter-ministerial agencies in coordination with the UNFCCC National Focal Point. Different government institutions, such as the Ministry of Agriculture of Turkmenistan, the Ministry of Energy of Turkmenistan, the Ministry of Construction and Architecture, and others will collaborate in capacity building, and be involved in data collection, archiving, and its analysis applying their sectoral expertise. Government-owned companies, such as State Corporation 'Turkmenenergo', The State Concern 'Turkmenneft', State Concern

"Turkmengas", and others collect, analyze, and archive activity data based on their sectorial expertise. Scientific organizations, such as the Academy of Sciences of Turkmenistan, the Scientific Research Agricultural Institute of the Ministry of Agriculture of Turkmenistan, Turkmen Agricultural University named after. S.A.Niyazov and others will be also be collecting and ensuring quality of activity data, developing country-specific emission factors. The private sector and non-governmental organizations, such as Women's Union of Turkmenistan, Union of Industrialists and Entrepreneurs of Turkmenistan, Youth organization of Turkmenistan named after Magtymguly and others will be involved in data collection, capacity building, and awareness raising activities during the proposed project implementation. The participation of various state and private sector organizations will be ensured through regular outreach concerning project's activities and stakeholder consultation/coordination meetings to be organized in regular intervals. International organizations, such as FAO, UNDP, GIZ and others will play an active role in knowledge sharing, technical expertise and capacity-building activities.

38. The GEF-funded project on the preparation of the First Biennial Report merged with the Fourth National Communication and Initial Biennial Update Report (GEF ID 9442) under the Umbrella Programme for the Preparation of Biennial Transparency Reports (BTRs) to the UNFCCC that supports eight (8) countries including Turkmenistan (GEF ID 11500) will assist Turkmenistan to prepare and submit the BTR1 combined with the 4NC to the UNFCCC, following the national commitments to the UNFCCC and the Paris Agreement. This project will collect the necessary data and information to prepare the national GHG inventory (1994-2021), expand the country's reporting on mitigation policies and measures towards achieving NDC commitments, and report on adaptation and other components of the BTR1. The proposed CBIT project will implement a broader approach to strengthen national capacities to comply with the ETF under the PA. The CBIT project will enhance national institutional capacities and information management systems for ETF compliance, reporting, data collection, methodologies, guidelines, and protocols, including QA/QC processes. Close collaboration between both projects shall be ensured. This collaborative approach will ensure that Turkmenistan can meet its climate reporting obligations with accuracy, transparency, and credibility, ultimately contributing to more effective climate action and policymaking. There is no overlap between the two projects. The CBIT project addresses the overall enhancement of the transparency system, while the GEF ID 9442 project concentrates on the detailed preparation and timely submission of BTR1. These projects complement each other by building a robust and comprehensive national capacity for transparency and climate reporting in Turkmenistan, ensuring systemic improvements and fulfilment of specific international reporting obligations.

39. Turkmenistan has not submitted its Adaptation Communication to the UNFCCC pursuing Article 7.10 of the Paris Agreement. However, the proposed CBIT project provides approaches to overcome identified existing barriers and capacity gaps related to adaptation, such as a technical capacity to monitor and report adaptation actions, information sharing and data management focused on adaptation.

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[1] https://data.worldbank.org/indicator/SP.POP.GROW?locations=TM

[2] https://data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS?locations=TMhttps://data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS?locations=TM

https://data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS?locations=TM[3] 3NC. https://unfccc.int/non-annex-I-NCshttps://unfccc.int/non-annex-I-NCs

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

[5] National Climate Change Strategy of Turkmenistan (2019)

[6] https://climateknowledgeportal.worldbank.org/country/turkmenistan/vulnerability

[7] Updated NDC of Turkmenistan.

[8] Tebaldi, Claudia, and David Lobell. 'Estimated impacts of emission reductions on wheat and maize crops.' *Climatic Change* 146 (2018): 533-545.

[9] https://www4.unfccc.int/sites/submissions/indc/Submission%20Pages/submissions.aspx

[10] https://unfccc.int/sites/default/files/NDC/2023-01/NDC_Turkmenistan_12-05-2022_approv.%20by%20Decree_Eng.pdf

[11] https://turkmenistan.un.org/en/182016-turkmenistan-makes-another-step-forward-global-climate-action

B. PROJECT DESCRIPTION

This section asks for a theory of change as part of a joined-up description of the project as a whole. The project description is expected to cover the key elements of good project design in an integrated way. It is also expected to meet the GEF's policy requirements on gender, stakeholders, private sector, and knowledge management and learning (see section D). This section should be a narrative that reads like a joined-up story and not independent elements that answer the guiding questions contained in the guidance document. (Approximately 3-5 pages) see guidance here

40. Based on the gaps and barriers discussed above to meet the UNFCCC reporting requirement, the key barriers that should be overcome to ensure the National MRV system can comply with the requirement of the Enhanced Transparency Framework in the Paris Agreement are as follows:

- **Barrier 1-Lack of integrated and systematic coordination and institutional mechanism for ETF reporting:** There is a lack of sharing, archiving, and regular updates of data related to ETF reporting. The national communication and BUR are in the process of development through the submission to UNFCCC. Yet, coordination and institutional arrangement are project based. The lack of institutional capacity to ensure continuous data and information-driven decision-making affects the transparent monitoring of NDC actions. Also, there is a lack of awareness among the stakeholders regarding the Paris Agreement and the ETF.

- **Barrier 2-Lack of technical expertise and knowledge on ETF reporting focusing on climate change mitigation, adaptation, and support received:** There is a lack of expertise and knowledge on the detailed calculation of the uncertainty of emissions to know factors contributing to the highest uncertainty. Similarly, there is a lack of information on the quality of estimates, and data quality issues. This is critical to ensure the comparability of estimates between years. So, Quality Assurance (QA)/Quality Control (QC) and verification processes are also limited. Government agencies have limited capacity for systematic collection, monitoring, reporting, and evaluating adaptation actions. There is a lack of harmonized indicator and monitoring systems for prioritized national adaptation activities. Insufficient data and information to assess the immediate climate

change adaptation action are another major gap. Limited technical capacity and resources for prioritizing and monitoring the NDC adaptation actions are also prominent.

- **Barrier 3- Absence of an integrated data and information system for ETF reporting focusing on climate change mitigation, adaptation and support received:** The majority of the activity data for the previous GHGI are collected indirectly from expert sources and statistics. Sometimes it is also approximated. Focusing on direct measurement and reporting is crucial to ensure quality activity data because insufficient activity data can lead to incomplete emissions estimates. Default IPCC values were also used sometimes. Developing country-specific emission factors will improve the estimates of GHG emissions. The lack of integrated data and information systems with comprehensive tools and methodologies to comply with ETF requirements is also prominent.

41. To overcome the identified barriers, the project is designed to strengthen Turkmenistan's technical and institutional capacity to comply with the Enhanced Transparency Framework (ETF) of the Paris Agreement as explained in Figure 2 Theory of Change. The CBIT project will ensure efficient and comprehensive climate change mitigation, adaptation, and support related information system through building technical and human capacities. To fulfill the requirement to submit BTR under the ETF institutional arrangements and coordination procedures will be established for the BTR preparation and submission with a particular focus on stakeholders' involvement and their inclusive participation for the Article 6 of the Paris Agreement (Output 1.1.2), that will facilitate international cooperation on climate change to reach climate targets and provide opportunity for financial support.

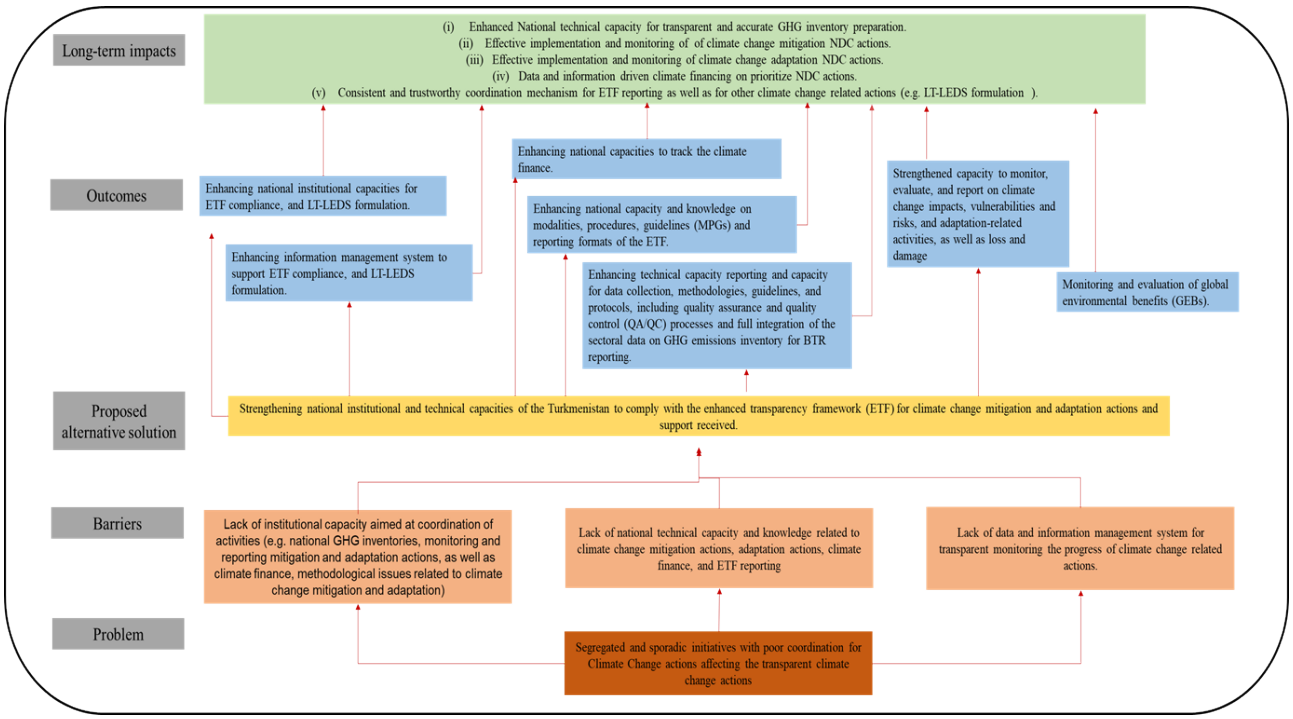

Figure 2: Theory of change (TOC) of the proposed CBIT project in Turkmenistan

42. The CBIT project will have a real impact on the low-carbon development of Turkmenistan. The global benefits will be derived through this project in the form of capacity development focusing on GHG inventories and emission reductions. This project will create coordination at the institutional level for GHG inventory, and NDC climate change mitigation and adaptation actions involving key national stakeholders. Without this project, there will be a sporadic project-based approach that does not contribute to building national capacity and probable duplication of international donor funding toward NDC implementation.

43. The operational, robust, and functional information management system focusing on the ETF of the proposed project will strengthen the capacity of the country to implement the NDCs and comply with ETF using high-quality GHG inventory data, as well as data on NDC actions (mitigation and adaptation) tracking, and climate finance. This will ultimately provide benefits considering the environmental conditions at the national and global levels. This integrated information system will serve as the measurement, reporting, and verification (MRV) system, will enable the design and prioritization of cost-effective project proposals to reduce GHG emissions and will avoid duplication. The project will strengthen the technical and operational capacity of national experts focusing on data collection and analysis, quality assurance/quality control (QA/QC), GHG inventory methodologies, and adaptation progress. The intended benefits will be achieved through the below described components:

Component 1: Strengthening national institutional arrangement and information management system to support ETF compliance, and Long-term Low Emissions and Development Strategies (LT-LEDS) formulation.

44. All the previous climate change related national documents and strategies, such as previous NCs, updated NDC, and National Climate Change Strategy (2019) highlighted lack of coordination among ministries, and departments related to cooperation on climate change-related decision-making affecting the ETF requirement of the Paris Agreement, as well as to ensure proper financial support. Therefore component 1 is dedicated to focus on developing the foundation for ETF.

45. This component will facilitate strengthening of the capacities of national and local institutions to place proper political and institutional structures to support ETF compliance and LT-LEDS formulation. This component aims to establish institutional roles and responsibilities with the outputs: established ETF roadmap, action plan and institutional arrangement for ETF compliance, and LT-LEDS formulation (Output 1.1.1), established information management system to support ETF compliance focused on GHG inventory, NDC tracking & progress, Climate Change Adaptation, Climate Finance, and LT-LEDS formulation (Output 1.2.1), enhanced stakeholder capacity for reporting climate finance (domestic and international) (Output 1.3.1), enhanced stakeholder capacity and knowledge on MPGs and ETF reporting (Output 1.4.1). Details of activities are listed under the Indicative Project Overview Table.

46. This institutional strengthening will focus on involvement of a broad range of stakeholders, from ministerial level to policymakers, civil society, scientific institutions, and the private sector. FAO's long-standing experience in institutional strengthening will be capitalized on this component. FAO has developed several tools for institutional assessment and strengthening under the Global CBIT project. Under this component, the tools such as (i) Biennial transparency report (BTR) guidance and roadmap tool, (ii) Greenhouse Gas Data Management (GHG-DM) tool, (iii) Institutional Arrangements for National Inventory Systems, and (iv) Action recommendations on capacity-building for transparency and reporting will be utilized to strengthen the institutional structure to comply with ETF. In addition, "Technical handbook for developing country Parties on: Preparing for implementation of the enhanced transparency framework under the Paris Agreement" will be utilized for institutional and technical capacity building.

47. To ensure the normal operation of domestic MRV and climate transparency a regular exchange of data and information should be in place. Taking into account current barriers, the data and information exchange will be formalized through memoranda of understanding (MoU) between stakeholders. The project will ensure ETF-related data-sharing processes are integrated with broader national coordination for data sharing and management for sustainable development, to ensure coordination with ongoing national communications. For example, the CBIT project utilizes the existing institutional mechanisms

and sectoral Leads; but will aim to further strengthen their institutionalization and functionality with a clear definition of procedures, roles, and responsibilities in line with ETF.

48. The project will develop a robust data and information management system focusing on NDC mitigation, adaptation actions, and support received (Output 1.2.1). This output will ensure data collection, archiving, and update protocol development for regular and systematic collection, documentation, and archiving to ensure accuracy, consistency, and reliability of climate change-related data in the country. The modules of the information system will be defined by the Interministerial working group and prioritized between the Ministries of the relevant economic sectors. Currently, the focus of the President is methane, but it can change with the start of the project. This system development will consult the 'A road map for establishing information systems for climate action and support' published under the collaboration of CBIT Global Coordination Platform (GEF funded) . The activities will be also based on the IPCC guidelines, FAO's Estimating Greenhouse Gas Emissions in Agriculture: A Manual to Address Data Requirements for Developing Countries (2015), FAO tools and resources on Mitigation of Climate Change in Agriculture (MICCA) program, and other sectoral guidelines . The activities will be also conducted based on Tracking Adaptation in Agricultural Sectors: Climate Change Adaptation Indicators of FAO , and Reporting adaptation through the biennial transparency report: A practical explanation of the guidance . The main users of the data and information management system will be the technical officers in government agencies. However, during the implementation phase, further discussions will be conducted by the inter-ministerial working group to explore the opportunities to see, whether the public can access some of the information that will be generated by the proposed data and information management system. Output 1.2.1 and Output 1.4.1 Enhanced stakeholder capacity and knowledge of MPGs and ETF reporting will be defined on the specific areas based on the Activity 1.2.1.2: Roadmap and action plan for an information management system to support the ETF compliance, and LT-LEDS formulation with gender sensitive stakeholder mapping and definition of roles and terms of reference (ToRs) are prepared and endorsed. When officially the focal points for the project steering committee and interministerial group will be appointed, the action plan and roadmap will indicate the details for information management system, as well as specific thematic areas.

Component 2: Strengthening national technical capacity for GHG inventory preparation and monitoring and reporting NDC climate change mitigation actions.

49. The proposed CBIT project will strengthen the technical capacity of the stakeholders in Turkmenistan with the targeted outputs of (i) Output 2.1.1: Enhanced technical capacity for estimating and reporting GHG emissions. Details of activities are listed under the Indicative Project Overview Table. When officially the focal points for the project steering committee and interministerial group will be appointed, the action plan and roadmap will be developed to indicate the details for information management system, as well as specific thematic areas. Moreover, based on the prepared BUR (not BTR) that will be submitted at the end of the year, the key category emissions will be identified, 2-3 categories per sector.

50. FAO has developed several tools for GHG inventory preparation and MRV system development under the Global CBIT projects ('Global Capacity-building Towards Enhanced Transparency in the AFOLU Sector (CBIT-AFOLU)', GEF ID 9864 and 'Building global capacity to increase transparency in the forest sector (CBIT-Forest)', GEF ID 10071). Under this component, the tools such as (i) Measurement, reporting, and verification (MRV) guidance for mitigation actions in the agriculture, forestry, and other land use (AFOLU) sector, (ii) Greenhouse Gas Data Management (GHG-DM) tool, (iii) UNFCCC Quality assurance (QA) process, (iv) Nationally determined contributions (NDC) tracking tool, (v) Nationally determined contributions in Agriculture, forestry and other land use (NDC-AFOLU) Navigator, (vi) Nationally determined contributions expert tool (NEXT), and (vii) FAOSTAT – Emissions will be utilized

to enhance the technical capacity of the stakeholders. For the AFOLU sector, training will be provided based on the IPCC guidelines for GHG inventory, ETF MPGs relevant to the AFOLU sector, Ex-Ante Carbon-balance Tool (EX-ACT), and FAO GLEAM-i tool relevant to livestock.

51. In addition to the AFOLU, other sectors, such as energy, industry, and waste that are included in the NDC, will be supported to build national capacity using tools such as GHG data management, archiving guidance, institutional arrangement tools, and e-learning modules. All relevant sectors will equally receive the required support for capacity building. The component will also ensure, gender-sensitive training programs for GHG inventory methodologies and tools, national-specific climatic and socio-economic scenarios, emission factors, methodologies, tools for mitigation assessment of GHG emission, climate change vulnerability assessment, and climate finance. The proposed training will utilize the ETF training materials being made available at the global CBIT platform, as well as the FAO e-learning courses.

52. Capacity for LULUCF assessment will be strengthened through hands-on training of relevant stakeholders using Collect Earth, the land representation matrix tool, and subsequent application of the tool by the trained participants in carrying out a nationwide LULUCF assessment for the period beyond the national communications.

53. In coordination with the Global CBIT-AFOLU project, targeted stakeholders will also complete the three e-learning courses on MRV: (a) preparing a greenhouse gas inventory under the ETF; (b) assessing uncertainties in the national greenhouse gas inventory with a focus on the LULUCF, and (c) estimation of methane emissions from enteric fermentation at Tier 2 level.
The activities 1.4.1.3 and 2.1.1.5 , while related to capacity building and knowledge dissemination, have distinct focuses and objectives within the broader framework of the CBIT project. Here's a breakdown of the differences:

Activity 1.4.1.3: Conducting technical capacity building training to formulate the National Inventory based on the Common Reporting Tables (CRT) for BTR
Objective: This activity is focused on building technical capacity specifically for the formulation of the National Inventory using the Common Reporting Tables (CRT) as part of the Biennial Transparency Report (BTR).
Key Aspects:
Technical Training: It aims at providing hands-on training to relevant stakeholders or government officials on how to use CRTs to formulate the National Inventory, which is a key component of the BTR.
Practical Application: The emphasis is on ensuring that participants gain the skills and knowledge necessary to practically apply CRTs in the context of their national GHG inventory work.
Target Audience: Likely targeted at technical experts, government officials, or other relevant stakeholders directly involved in the preparation of the National Inventory.

Activity 2.1.1.5: Developing knowledge materials on MPGs of ETF reporting using Common Reporting Tables of the BTR for GHG inventory and tracking NDC actions on climate change mitigation using the local language
Objective: This activity focuses on the development of knowledge materials related to the Modalities, Procedures, and Guidelines (MPGs) of Enhanced Transparency Framework (ETF) reporting, using CRTs for both GHG inventory and tracking Nationally Determined Contributions (NDC) actions on climate change mitigation.
Key Aspects:
Knowledge Material Development: The activity involves creating educational or informational materials that explain how to use CRTs in the context of the MPGs of the ETF.
Language Accessibility: A key component is the localization of materials—these materials will be developed in the local language, making them more accessible to a broader audience within the country.

Comprehensive Coverage: While it includes GHG inventory, it also extends to tracking NDC actions, offering a broader perspective on how CRTs fit within the overall ETF reporting requirements.

Target Audience: The materials could be used by a broader range of stakeholders, including policymakers, technical experts, and the general public, to increase overall understanding and capacity related to ETF reporting.

Summary of Differences:

Focus: Activity 1.4.1.3 is specifically about training on how to use CRTs for the National Inventory, while Activity 2.1.1.5 is about creating knowledge materials on the broader context of ETF reporting, including GHG inventory and NDC tracking.

Scope: Activity 1.4.1.3 is narrower, focusing on technical training, while Activity 2.1.1.5 is broader, covering education and awareness in a way that is accessible to a wider audience.

Output: Activity 1.4.1.3 will likely result in a trained group of individuals capable of using CRTs for National Inventory formulation. In contrast, Activity 2.1.1.5 will result in the creation of localized knowledge materials to aid understanding of ETF reporting requirements across different groups.

Component 3: Strengthening national technical capacity to monitor and report NDC climate change adaptation actions.

54. This project will conduct a gender-sensitive capacity gap assessment on the existing system for M&E climate change impacts, risks, and vulnerabilities of NDC prioritized sectors (Activity 3.1.1.1). The project is expected to contribute towards enhancing monitoring and evaluation of national adaptation actions (Activity 3.1.1.3), loss and damage assessment (Output 3.1.2), as well as carrying out consultations on the capacity gap assessment that will be carried out (Activity 3.1.1.2). The project will also develop gender-sensitive knowledge materials on MPGs of ETF reporting for adaptation by developing guidelines and action plans (Activity 3.1.1.5). In addition, the project will develop national capacity on loss and damage assessment by supporting the government to establish IWG (Activity 3.1.2.1), background knowledge materials (Activity 3.1.2.2 and Activity 3.1.2.3), and capacity building training (Activity 3.1.2.4), and protocol for data collection, analysis, and reporting (Activity 3.1.2.6). In addition, during the PPG phase, consultations will be done with relevant ministries/bodies for the official establishment of the Inter-Ministerial Agency Working Group (IWG) on the institutionalization of the methodology for assessing the loss and damage for NDC sectors, particularly for the agricultural sector in Turkmenistan. Output 3.1.1 Enhanced national technical capacity for monitoring and reporting NDC climate change adaptation actions will focus on the key vulnerable sectors like agriculture, water and forest resources.

55. The project will develop nationally appropriate indicators related to adaptation considering existing SDGs and national indicators, *Tracking Adaptation in Agricultural Sectors: Climate Change Adaptation Indicators* of FAO [2], and *Reporting adaptation through the biennial transparency report: A practical explanation of the guidance* [3]. FAO has developed several tools for climate change resiliency, monitoring, and evaluation under the Global CBIT project. Under this component, the tools [4] such as (i) Loss and damage assessment, (ii) Monitoring and Evaluation (M&E) training package, (iii) Modelling System for Agricultural Impacts of Climate Change (MOSAICC), and (iv) Self-evaluation and Holistic Assessment of climate resilience of farmers and pastoralists (SHARP) will be utilized under this component.

Component 4: Monitoring and evaluation.

56. This component will mainly be focused on monitoring and evaluation of global environmental

benefits (GEBs); mid-term review and final evaluation. In addition, to ensure proper monitoring and evaluation, there will be also preparation of periodic progress reports.

Transformatory potential of the Project and the Global Environmental Benefits

57. The GEF Focal Area "*CCM-CBIT: Support capacity-building needs for transparency under the Paris Agreement through the CBIT*" supports the proposed CBIT project. The national and sectoral institutional and technical capacities of Turkmenistan to track the progress of national NDC actions on climate change mitigation and adaptation, as well as support received will be enhanced through the GEF investment for this proposed CBIT project. It will eventually ensure the transparency, accuracy, consistency, compatibility, and clarity of data and information related to climate change in the country. Therefore, without this project the barriers mentioned earlier will likely persist in the country, if the proposed project is not financed.

58. Hence, without this project, the national as well as international aspiration of enhancing climate transparency will be difficult to achieve. Climate change constitutes one of the political priorities in the country; yet existing technical and institutional capacity results in barriers affecting the execution of priorities of NDC into visible actions. Therefore, the country needs to focus on defining and implementing coordinated actions focusing on data and information analysis, and systematization of NDC actions. This project will give this opportunity to Turkmenistan, together with the mechanisms and tools, gradually to make them more efficient and transparent.

59. The CBIT project will have a real impact on the low-carbon development of Turkmenistan. The global benefits will be derived through this project in the form of capacity development focusing on GHG inventories and emission reductions. This project will create coordination at the institutional level for GHG inventory, and NDC climate change mitigation and adaptation actions involving key national stakeholders. Without this project, there will be a sporadic project-based approach that does not contribute to building national capacity and probable duplication of international donor funding toward NDC implementation.

60. The operational, robust, and functional information management system focusing on the ETF of the proposed project will strengthen the capacity of the country to implement the NDCs and comply with ETF using high-quality GHG inventory data, as well as data on NDC actions (mitigation and adaptation) tracking, and climate finance. This will ultimately provide benefits considering the environmental conditions at the national and global levels. This integrated information system will serve as the measurement, reporting, and verification (MRV) system, will enable the design and prioritization of cost-effective project proposals to reduce GHG emissions and will avoid duplication. The project will strengthen the technical and operational capacity of national experts focusing on data collection and analysis, quality assurance/quality control (QA/QC), GHG inventory methodologies, and adaptation progress.

61. *Scaling up:* The involvement of national key stakeholders will help to manage adequate exit points of the project, avoid disruption, and will ensure scaling up in future for other national initiatives, such as sustainable development goals (SDGs) tracking. Results from the project will also be disseminated widely at the national and regional levels through the established information-sharing networks and forums. Also, knowledge materials will be available through the proposed data and information management system. The master trainers through ToT program, and involved key national stakeholders will disseminate their acquired knowledge through the established institutional coordination. Therefore, long-term scaling up of the project benefits will be ensured through the institutional arrangement of the project.

62. *Capacity development*. During the inception workshop the stakeholders also highlighted tracking of adaptation, mitigation and climate finance of NDC actions from individual and institutional capacity point of view is still limited. That is why the CBIT project will enhance the national capacity through strengthening institutional arrangements, institutional and human capacity building, and knowledge sharing. It will also ensure technical capacity development of wider group of stakeholders for tracking the mitigation, adaptation and climate finance actions of NDC in the country, and also associated information systems. National academia and research institutions will be involved for data and information collection and capacity building activities with a focus on gender equality. The capacity development activities will also utilize the FAO developed courses and materials [5][2] under the global CBIT project, such as (a) preparing a greenhouse gas inventory under the ETF; (b) assessing uncertainties in the national greenhouse gas inventory with a focus on the LULUCF; and (c) estimation of methane emissions from enteric fermentation at Tier 2 level.

Stakeholder Engagement in Project Implementation

63. Ministry of Environmental Protection of Turkmenistan is the key state institution responsible for the implementation of activities in the field of environmental protection. It is also the responsible executing agency of the National Strategy of Turkmenistan on Climate Change (NSTCC) for issues related to climate change, including the attraction of environmentally friendly technologies to the country, adapting to climate change, reducing emissions and receiving international assistance. The national system for inventorying GHG emissions is organized on a centralized basis. During the preparation of the NC3, the overall management of the inventory was carried out by the Ministry of Environmental Protection (Figure 3). The main work on processing and compiling information for the inventory was also carried out by the employees of the Ministry of Environmental Protection. Unlike many developing countries, all the main work on the inventory of greenhouse gases was carried out by national experts of Turkmenistan.

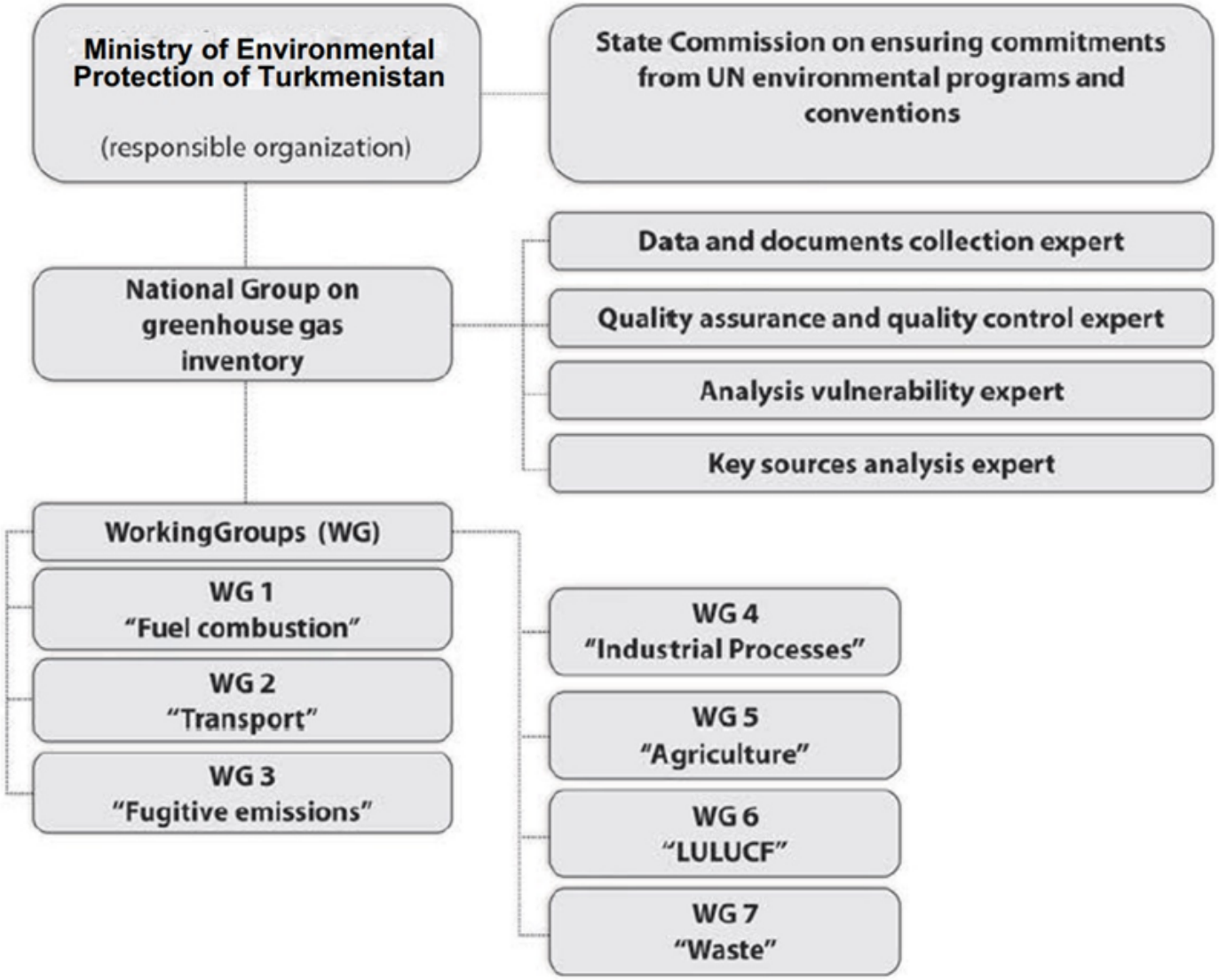

FIGURE 3: GHG INVENTORY INSTITUTIONAL ARRANGEMENTS IN TURKMENISTAN

64. As part of the GHG inventory preparation for NCs, the responsible organization makes an official request to the Ministry of Environmental Protection and the Ministry of Foreign Affairs of Turkmenistan, which redirects the request to obtain the necessary data to all relevant agencies. Below are the national entities involved with the GHG inventory preparation:

Table 2: National entities involved with the GHG inventory preparation in Turkmenistan

Sector	Data-providing ministries and departments which submit data for the GHG Inventory
Energy	– State Committee of Statistics of Turkmenistan – State Concern 'Turkmengaz' – State Concern 'Turkmenneft' – Ministry of Energy of Turkmenistan – Ministry of Industry and Construction Production of Turkmenistan – Ministry of Construction and Architecture – Ministry of Textile Industry of Turkmenistan – State Concern 'Turkmenhimiya' – Agency 'Turkmendemiryollary' – Agency 'Turkmenavtoulaglary' – Agency 'Turkmenhowayollary' – Agency 'Turkmendenizderyaellary'

Sector	Data-providing ministries and departments which submit data for the GHG Inventory
	– Ministry of Agriculture
Industrial processes	– State Committee of Statistics of Turkmenistan – State Concern 'Turkmengaz' – State Concern 'Turkmenneft' – Ministry of Energy of Turkmenistan – Ministry of Industry and Construction Production of Turkmenistan – Ministry of Construction and Architecture – Ministry of Textile Industry of Turkmenistan – State Concern 'Turkmenhimiya' – Union of Industrialists and Entrepreneurs of Turkmenistan
Agriculture and LULUCF (AFOLU)	– State Committee of Statistics of Turkmenistan – Ministry of Agriculture – Ministry of Defense of Turkmenistan (Department of Emergency Situations and Rescue Operations)
Waste	– State Committee of Statistics of Turkmenistan – Khyakimlik city of Ashgabat – Khyakimlik of Akhal velayat – Khyakimlik of the Balkan velayat – Khyakimlik of Dashoguz velayat – Khyakimlik of Lebap velayat – Hyakimlik of Mary velayat – State Committee for Water resources

65. Similarly, for adaptation, all the necessary data for analysis in the field of adaptation to climate change are available in the relevant departments of the agro-industrial complex, except for health data. Below is the institutional arrangement for data collection for adaptation:

Table 3: Institutional arrangements for data collection for adaptation in Turkmenistan

Type of data	Collecting organization
Hydrometeorological	Hydrometeorological Service of the Ministry of Environmental Protection
Environmental	Environmental Service of the Ministry of Environmental Protection
Water resources	State Committee for Water Resources
Healthcare	Ministry of Health and Medical Industry

Emergency situations	Department of Emergency Situations and Rescue Operations under the Ministry of Defense

66. All issues of international climate finance are resolved jointly by the Ministry of Foreign Affairs, the Ministry of Finance and Economy, and the Ministry of Environmental Protection within their mandate. The main source of climate finance in Turkmenistan is the state budget of the country. However, at the moment there is no separate budget for climate financing. Despite this, climate financing is carried out within other budget lines (for example, environmental protection, etc.). All information and data on international climate financing are collected by the Ministry of Environmental Protection [6].

67. The State Commission for Emergency Situations (SCES) under the Cabinet of Ministers of Turkmenistan is the main body responsible for the prevention and elimination of the consequences of emergencies related to natural disasters. The Commission also coordinates all emergency responses. In May 2007, the State Agency for Emergency Situations was created and was later transformed into the Department of Emergency Situations under the Ministry of Defense. Disaster preparedness was included in the United Nations Development Assistance Framework (UNDAF) review of Turkmenistan for the first time, and the regional conference on seismic risk reduction held in the capital city Ashgabat demonstrated Turkmenistan's willingness to cooperate at the regional level. In 2011, the country requested participation in the Knowledge Management workshop held under the Disaster Preparedness European Community Humanitarian Office (DIPECHO) project. Although not formally a part of the project, Turkmenistan has increased its efforts in disaster risk reduction and integrated disaster risk reduction into education.

68. At the local level, the coordination of disaster management involves the province's authorities in coordination with the Ministry of Defense. Regular meetings are held at velayat (province) and etrap (district) levels where representatives of relevant organizations and khykimliks (heads of the local authorities) discuss issues of water use and was the main body responsible for dealing with emergency situations including natural hazard related disasters.

69. The project has reached out to all the relevant stakeholders in consultations during the formulation and have described the structures in which the consultations and coordination should be set up during the implementation of the project and to ensure greater collaboration and cooperation in efforts to monitor, measure, report and validate climate change related information, including inventories, trends, measures, progress, support needed and received.

70. Private sector representatives have also been involved directly during the inception workshop. Moreover, during the project implementation phase based on the experience of the government institutes to work with private sector focusing on climate change mitigation and adaptation, relevant private sector entities will be included to the institutional arrangements. The private sector entities in Turkmenistan can be from AFOLU, energy, industry, and waste sectors based on the needs of the project. If relevant, private sector entities (AFOLU, energy, industry, and waste sectors) will be involved during the capacity building trainings. The project executing entity, and FAO will use previously collected data/information from previous national communications and national policy documents on climate change to explore the opportunity to involve private sector entities.

71. The project will ensure that private companies, professional institutes and associations will be involved within the institutional arrangement, capacity building and data collection activities. The project will also consult with relevant ministries to involve the private entities of the targeted sectors of this project.

Knowledge Management and Learning

72. The project aims to promote a knowledge-sharing culture and coordination on data collection and

analysis in Turkmenistan, as well as globally through CBIT Global Coordination Platform[1]. The Capacity-building Initiative for Transparency – Global Support Programme (CBIT-GSP), a five-year global project, funded by the Global Environment Facility (GEF), implemented by the United Nations Environment Programme (UNEP) and executed by the UNEP – Copenhagen Climate Center (UNEP-CCC) has the objective to provide streamlined support and capacity-building at the national, regional, and global level in responding to the reporting provisions under the UNFCCC and the Paris Agreement's Enhanced Transparency Framework, and ultimately increase ambition for climate action.

73. Turkmenistan, as the member of the Regional Network for Transparency in Central Asia and the Caucasus under the CBIT-GSP project, requested support to improve the LULUCF sector of their GHG Inventory, in order to be included in the upcoming 4th National Communication and in the development of the first BTR.

74. Within the PPG stage for "*Strengthening the capacity of Turkmenistan to comply with the ETF under the Paris Agreement*" FAO jointly with UNDP and UNEP-CCC organized a 3-day in-person training (3-5 April 2024) for the national inventory team, which was delivered with the aim at improvement of Land Use Classification, Quality Assurance and Quality Control (QA/QC) Procedures and Quantification Tools for the LULUCF Sector. This activity is one of the first coordinated efforts in supporting Turkmenistan in addressing the transparency requirements.

75. To support the improvement requested by Turkmenistan, two main activities were carried out:

- The review of the latest national GHG inventory for the LULUCF sector, which produced an analysis of gaps and needs in LULUCF of Turkmenistan;
- The 3-day in-person training on Land Use Classification, QA/QC procedures and tools.

76. FAO will continue to work closely with UNEP-GSP and UNDP to enhance the country's efforts. FAO currently has 4 CBIT projects in Central Asia and Turkiye at different stages. FAO plans to use the experience from Turkiye to share the advanced practices for Central Asian countries. The basic idea is to try and build up a platform between all six countries where they can share experiences and expertise around the climate change monitoring and reporting issues.

-
- 77. For national level knowledge management, the project will mainly rely on coordination among government ministries' using existing databases, local governments, donor-funded projects and local actors. The project will also utilize training on ETF principles involving different stakeholders so that various actors can learn and collaborate towards improved transparency in climate change related issues. Knowledge products (training module, and informative booklet on climate change related issues) will be designed and targeted at specific audiences using existing communication channels designed to reach those audiences, and translated into local languages. In addition, all the capacity building training will be recorded and hosted within the relevant website for dissemination of the technical knowledge even after the project.
-
- 78. A gender-sensitive/responsive knowledge management and communications strategy will be developed at the start of the project, building on the existing GEF strategy[2][3], to support implementation and replication of project activities. The strategy will include recommended products for public awareness and other knowledge management, including training material and manuals, and

communication materials. These products will be disseminated within the country based on existing cooperation networks, and outside the country through Global CBIT project.

- 79. Institutional mechanisms for this project will build on existing national structures and political processes rather than create new systems. Institutional and technical capacities developed through the project will build upon existing capacity assessments to avoid overlaps. Existing online platforms and information systems will be linked to a central portal rather than an information system redesigned from scratch. While data will be uploaded to a central portal, it is expected that full data integration will take many years. CBIT support will begin this process by establishing the framework, systems and capacity for a fully integrated central climate change mitigation, adaptation and finance information portal in the long term.
- 80. As highlighted above, numerous past and ongoing programmes in the country aimed to increase institutional capacity for producing, analysing and reporting on data. However, best practices are not commonly shared among government ministries, donors and implementing agencies. With CBIT support, SIC ICSD will consolidate these best practices into a single place, and disseminate through existing communication channels. This will help to design better training programmes on data collection, analysis and reporting nationwide. Such best practices will be shared through the existing relevant website in the form of videos, training manuals and other knowledge materials (e.g. training proceedings and exercise materials), helping to standardize these practices. This coordination will not only leverage donor funding more effectively but will promote cooperation among different sectors and regions of the country, contributing to nation-wide collaboration and harmonization.
- 81. Under Output 1.1.1, 1.2.1, 1.3.1, 2.1.1, and 3.1.1 the project will develop and implement a knowledge management plan and knowledge materials through guideline and action plan, and climate finance reporting, roles and responsibilities of the stakeholders. It will ensure strategic communications for outreach and dissemination of project results. The knowledge products will build on previous capacity building initiatives implemented in the country, and globally. Besides, for strategic communications the project will ensure dissemination of knowledge and experiences generated under the project. These will be shared through the existing partnership between SIC ICSD and other national agencies, and academia. The information and knowledge sharing will directly contribute to the project's goal to build national capacity and awareness on the ETF and its data collection, monitoring and reporting processes. As highlighted in the project's logical framework, outreach activities will be used to communicate mitigation and adaptation measures, policies and their impacts. This will include documentation of results (knowledge generated by the project, training programmes and workshops) disseminated through existing communication channels mentioned above through a user-friendly way, and through the global CBIT platform to disseminate best practices and lessons learned. The use of alternative media and means of communication (such as social media, webinars, etc.) will also be explored in view of any possible COVID 19 or other pandemic related lockdowns.

Table 4: The key deliverables, associated timeline and budget for Communication and Knowledge Management:

Deliverable	Timeline	Budget, USD
1. Activity 1.1.1.1: Conducting and disseminating technical, institutional, and data gaps assessment to support the ETF requirement and LT-LEDS) formulation.	Year 1	10,000
2. Activity 1.2.1.5: Developing knowledge materials on developed information management system using local language to raise stakeholder awareness.	Year 1	10,000
3. Activity 1.3.1.2 Developing guidelines and action plans for reporting national climate finance information related to NDC actions at national, sub-national, program, and project levels.	Year 1	10,000

4. Activity 1.3.1.4 Developing knowledge materials on MPGs of ETF reporting for climate finance using local language to raise stakeholder awareness.	Year 1	10,000
5. Activity 1.4.1.2 Developing gender sensitive knowledge materials on ETF requirements, processes, and procedures using local language to raise stakeholder awareness.	Year 1	10,000
6. Activity 2.1.1.4 Developing knowledge materials on MPGs of ETF reporting using Common Reporting Tables of the BTR for GHG inventory and tracking NDC actions on climate change mitigation using the local language.	Year 1	10,000
7. Activity 3.1.1.3 Developing guidelines and action plans on M&E of NDC adaptation actions, at national, sub-national, program, and project levels.	Year 1	10,000
8. Activity 3.1.1.5 Developing knowledge materials on MPGs of ETF reporting for adaptation, using the local language.	Year 1	10,000
9. Activity 3.1.2.2 Preparation of a background document and knowledge materials on current institutional framework and existing methodologies on loss and damage.	Year 3	10,000
10. Activity 3.1.2.6: Developing knowledge materials on TCCTIMS using the local language.	Year 3	10,000
11. Development and implementation of KM and communications strategy by National Knowledge and data management Expert	Year 1	15,500
Total Budget		**115,500**

[1] https://www.cbitplatform.org/

[2] https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.C.54.06_Gender_Strategy_0.pdf

[1] https://www.fao.org/climate-change/our-work/what-we-do/transparency/tools-resource?

[2] Tracking Adaptation in Agricultural Sectors: Climate Change Adaptation Indicators (FAO 2017). https://www.fao.org/3/i8145e/i8145e.pdf

[3] Reporting Adaptation through the Biennial Transparency Report. A practical explanation of the guidance. UNEP and DTU (2020). https://climateactiontransparency.org/wp-content/uploads/2020/09/Reporting-adaptation-through-the-biennial-transparency-report_an-explanation-of-the-guidance_ICAT_UNEP-DTU-PARTNERSHIP-min.pdf

[4] https://www.fao.org/climate-change/our-work/what-we-do/transparency/tools-resource?

[5] https://www.fao.org/climate-change/our-work/what-we-do/transparency/tools-resource?

[6] As per the interview with the Ministry of Agriculture and Environmental Protection

Institutional Arrangement and Coordination with Ongoing Initiatives and Project.

Please describe the Institutional Arrangements for the execution of this project, including financial management and procurement. If possible, please summarize the flow of funds (diagram), accountabilities for project management and financial reporting (organogram), including audit, and staffing plans. (max. 500 words, approximately 1 page)

A. Institutional arrangements for project implementation.

82. All project decisions will be taken by the Interstate Commission on Sustainable Development (ICSD). FAO will act as Implementing Agency, and as such will provide technical backstopping to the Executing Agency. The project organization structure is as follows:

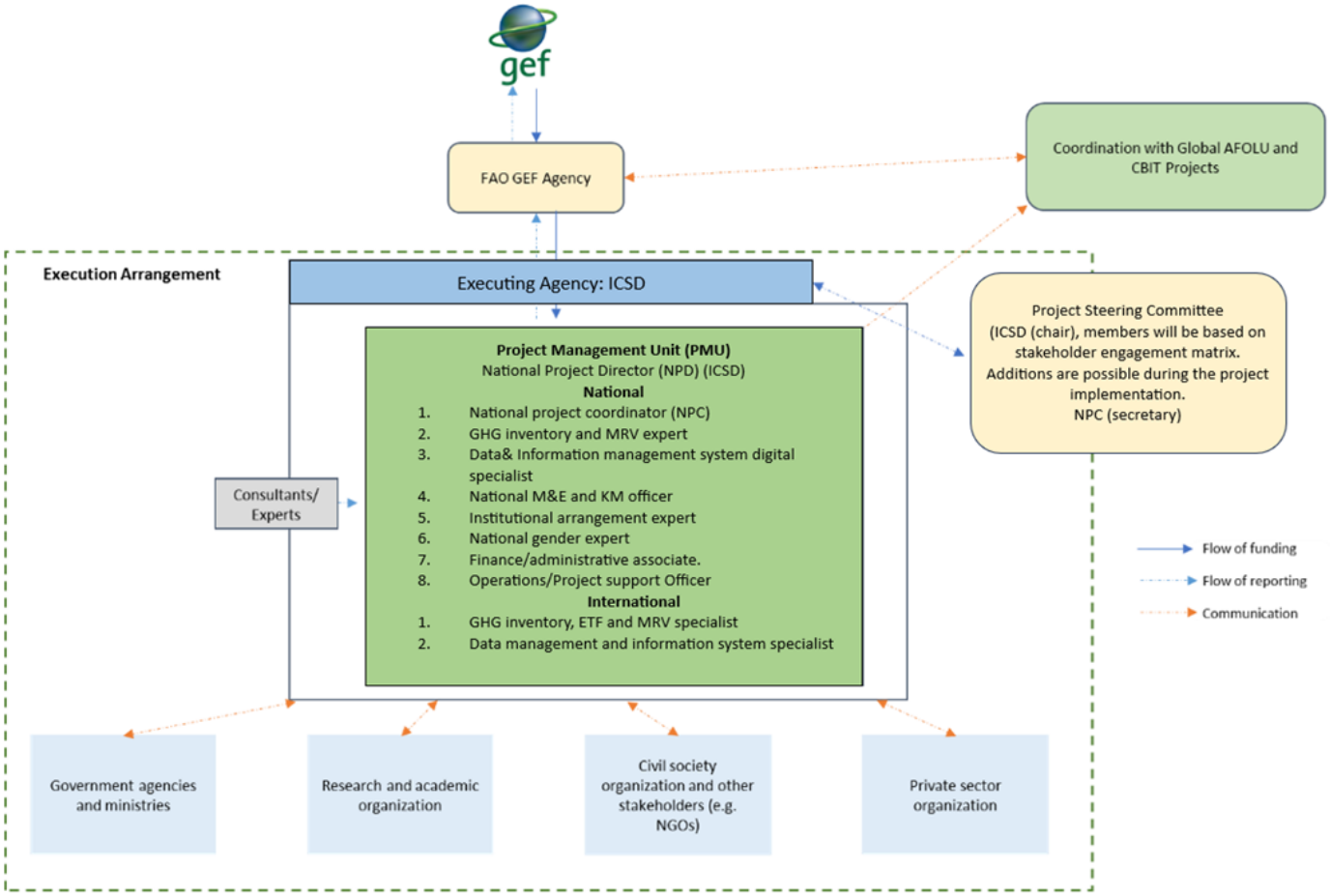

FIGURE 5: PROJECT ORGANIZATION ARRANGEMENT

83. The government will designate a National Project Director (NPD). The NPD, located in SIC ICSD IFAS, will be responsible for coordinating the activities with all the national bodies related to the different project components, as well as with the project partners. He/she will also be responsible for supervising and guiding the Technical Project Coordinator (see below) on the government policies and priorities.

84. The NPD (or designated person from lead national institution) will chair the Project Steering Committee (PSC) which will be the main governing body of the project. The PSC will approve Annual Work Plans and Budgets on a yearly basis and will provide strategic guidance to the Project Management Team and to all executing partners.

85. The PSC will be comprised of representatives from key ministries and departments, academia, private sector organization and NGOs as mentioned in the stakeholder engagement matrix (additions are possible during the project implementation). The members of the PSC will each assure the role of a Focal Point for the project in their respective agencies. Hence, the project will have a Focal Point in each concerned institution.

As Focal Points in their agency, the concerned PSC members will: (i) technically oversee activities in their sector; (ii) ensure a fluid two-way exchange of information and knowledge between their agency and the project; (iii) facilitate coordination and links between the project activities and the work plan of their agency; and (iv) facilitate the provision of co-financing to the project.

86. The Technical Project Coordinator (TPC) (see below) will be the Secretary to the PSC. The PSC will meet at least twice per year to ensure: i) Oversight and assurance of technical quality of outputs; ii) Close linkages between the project and other ongoing projects and programmes relevant to the project; iii) Timely availability and effectiveness of co-financing support; iv) Sustainability of key project outcomes, including up-scaling and replication; v) Effective coordination of governmental partners work under this project; vi) Approval of the six-monthly Project Progress and Financial Reports, the Annual Work Plan and Budget; vii) Making by consensus, management decisions when guidance is required by the Technical Project Coordinator of the Project Management Unit (PMU).

87. A Project Management Unit (PMU) will be co-funded by the GEF grant and established in Ashgabat. The main functions of the PMU, following the guidance of the Project Steering Committee, are to ensure overall efficient management, coordination, implementation and monitoring of the project through the effective implementation of the annual work plans and budgets (AWP/Bs). The PMU will be composed of an TPC, who will work full-time for the project lifetime. In addition, the PMU will include other administrative and technical staffs (e.g. knowledge management and monitoring and evaluation specialist, National MRV Specialist, etc.)[1][4]
https://unfao-my.sharepoint.com/personal/kaan_basaran_fao_org1/Documents/Documents%20-%20REU/COUNTRIES/TUK%20-%20Turkmenistan/Projects/GEF%20-%20Turkmenistan/GCP.TUK.001.GFF_CBIT/GCP.TUK.11070.GFF_CBIT_Prodoc_submission_24.06.12.docx - _ftn1
88. The TPC will oversee daily implementation, management, administration and technical supervision of the project, on behalf of the Operational partner and within the framework delineated by the PSC. She/he will be responsible, among others, for:

- Coordination with relevant initiatives;
- Ensuring a high level of collaboration among participating institutions and organizations at the national and local levels;
- Coordination and close monitoring of the implementation of project activities;
- Tracking the project's progress and ensuring timely delivery of inputs and outputs;
- Providing technical support and assessing the outputs of the project national consultants hired with GEF funds, as well as the products generated in the implementation of the project;
- Implementing and managing the project's monitoring and communications plans;
- Organizing project workshops and meetings to monitor progress and preparing the Annual Budget and Work Plan;
- Submitting the six-monthly Project Progress Reports (PPRs) with the AWP/B to the PSC and FAO;

- Preparing the first draft of the Project Implementation Review (PIR);
- Supporting the organization of the mid-term and final evaluations in close coordination with the FAO Budget Holder and the FAO Independent Office of Evaluation (OED);
- Informing the PSC and FAO of any delays and difficulties as they arise during the implementation to ensure timely corrective measure and support.

89. FAO will be the GEF Implementing Agency (IA) for the Project, providing project cycle management and support services as established in the GEF Policy. As the GEF IA, FAO holds overall accountability and responsibility to the GEF for delivery of the results. In the IA role, FAO will utilize the GEF fees to deploy three different actors within the organization to support the project, as follows:

- The Budget Holder, which is the FAO Representative in Turkmenistan, will provide oversight to the overall implementation process carried out by the implementing partner;
- The Lead Technical Officer(s), the Natural Resources Officer from FAO Sub-regional Office for Central Asia, will provide oversight/support to the projects' technical work in coordination with government representatives participating in the Project Steering Committee;
- The Funding Liaison Officer(s) from FAO GEF Coordination Unit will monitor and support the project cycle to ensure that the project is being carried out and reporting done in accordance with agreed standards and requirements.

90. FAO responsibilities, as GEF agency, will include:
- Administrate funds from GEF in accordance with the rules and procedures of FAO;
- Oversee project implementation in accordance with the project document, work plans, budgets, agreements with co-financiers, Operational Partners Agreement(s) and other rules and procedures of FAO;
- Provide technical guidance to ensure that appropriate technical quality is applied to all activities concerned;
- Conduct at least one supervision mission per year; and
- Reporting to the GEF Secretariat and Evaluation Office, through the annual Project Implementation Review, the Mid Term Review, the Terminal Evaluation and the Project Closure Report on project progress;
- Financial reporting to the GEF Trustee.

91. It should be noted that the identified Operational Partner(s) or OP, results to be implemented by the OP and budgets to be transferred to the OP are non-binding and may change due to FAO internal partnership and agreement procedures which have not yet been concluded at the time of submission of this funding proposal.

B. Coordination with other relevant GEF-financed projects and other initiatives.

92. The proposed CBIT project will cooperate with the following GCF- and GEF-supported project in Turkmenistan in Terms of institutional arrangement, technical capacity building and data collection:

- Umbrella Programme for the Preparation of Biennial Transparency Reports (BTRs) to the UNFCCC. Preparation of the first BTR via top-up financing.;

- GCF Readiness Proposal "Improving the capacity of Turkmenistan to access climate finance through capacity building and strategic frameworks";
- GCF Readiness Proposal "Developing a National Adaptation Planning Process in Turkmenistan";
- GCF Readiness Proposal "NDA Strengthening and Country Programming support for Turkmenistan and initiating a Regional Approach to Climate Action";
- Catalyzing the Nature-Positive Transformation of the Agricultural Sector in Turkmenistan towards Enhanced Resilience to Climate Change Project;
- Developing National Capacity of Turkmenistan through Improving Regulatory Environment towards Energy Efficient and Sustainable Building Sector;
- Conservation and Sustainable Management of Land Resources and High Nature Value Ecosystems in the Aral Sea Basin for Multiple Benefits;
- Sustainable Cities: Integrated Green Urban Development in Ashgabat and Awaza.

93. The proposed project will also coordinate with the global CBIT project: (i) to identify needs and gaps in national transparency systems, (ii) to share lessons learned through regional and global meetings, (iii) enabling knowledge sharing to facilitate transparency enhancements, and (iv) access to emerging practices, methodologies, and guidance on transparency of climate action and support. In addition, the project will also coordinate with the two FAO global CBIT projects: (i) Global capacity-building products towards enhanced transparency in the AFOLU sector (CBIT-AFOLU), and (ii) Building global capacity to increase transparency in the forest sector (CBIT-Forest). The coordination will be in the form of access to emerging practices, methodologies, and guidance on transparency of AFOLU and Forestry sector.

94. Other ongoing projects e national actions towards climate change mitigation and adaptation, and linkages with proposed CBIT project are presented in Table below.

Table 5: An overview of recent National Projects focusing on change mitigation and adaptation and linkages with proposed CBIT project.

Other Ongoing Projects	Linkages with proposed CBIT project
Title: Improving the capacity of Turkmenistan to access climate finance through capacity building and strategic frameworks. Funded by: GCF	The CBIT project will engage with this project in order to build on the coordination mechanisms, institutional arrangement, capacity building on climate finance issues. Namely, the developed climate finance tool will be disseminated through CBIT project.

Other Ongoing Projects	Linkages with proposed CBIT project
Title: Developing a National Adaptation Planning Process in Turkmenistan. Funded by: GCF	The CBIT project will engage with this project in order to build on the coordination mechanisms, institutional arrangement, capacity building on adaptation planning issues, and monitoring framework developed by this project.
Title: Developing National Capacity of Turkmenistan through Improving Regulatory Environment towards Energy Efficient and Sustainable Building Sector. Funded by: GEF	The CBIT project will engage with this project in order to build on the coordination mechanisms, institutional arrangement, capacity building on mitigation planning issues.
Title: Conservation and Sustainable Management of Land Resources and High Nature Value Ecosystems in the Aral Sea Basin for Multiple Benefits. Funded by: GEF	Lessons learned and experiences from the project will be considered.
Title: Integrated Green Urban Development in Ashgabat and Awaza Funded by: GEF	Lessons learned and experiences from the project will be considered.

[1] Please see the TORs of the members of the PMU in the relevant annex

Will the GEF Agency play an execution role on this project?

If so, please describe that role here and the justification.

Also, please add a short explanation to describe cooperation with ongoing initiatives and projects, including potential for co-location and/or sharing of expertise/staffing (max. 500 words, approximately 1 page)

Core Indicators

Indicate expected results in each relevant indicator using methodologies indicated in the GEF-8 Results Measurement Framework Guidelines. There is no need to complete this table for climate adaptation projects financed solely through LDCF and SCCF.

Indicator 1 Terrestrial protected areas created or under improved management

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
0	0	0	0

Indicator 1.1 Terrestrial Protected Areas Newly created

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
0	0	0	0

Name of the Protected Area	WDPA ID	IUCN Category	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)

Indicator 1.2 Terrestrial Protected Areas Under improved Management effectiveness

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
0	0	0	0

Name of the Protected Area	WDPA ID	IUCN Category	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)	METT score (Baseline at CEO Endorsement)	METT score (Achieved at MTR)	METT score (Achieved at TE)

Indicator 2 Marine protected areas created or under improved management

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
0	0	0	0

Indicator 2.1 Marine Protected Areas Newly created

Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
0	0	0	0

Name of the Protected Area	WDPA ID	IUCN Category	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)

Indicator 2.2 Marine Protected Areas Under improved management effectiveness

Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
0	0	0	0

Name of the Protected Area	WDPA ID	IUCN Category	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)	METT score (Baseline at CEO Endorsement)	METT score (Achieved at MTR)	METT score (Achieved at TE)

Indicator 3 Area of land and ecosystems under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
0	0	0	0

Indicator 3.1 Area of degraded agricultural lands under restoration

Disaggregation Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 3.2 Area of forest and forest land under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 3.3 Area of natural grass and woodland under restoration

Disaggregation Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 3.4 Area of wetlands (including estuaries, mangroves) under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 4 Area of landscapes under improved practices (hectares; excluding protected areas)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
0	0	0	0

Indicator 4.1 Area of landscapes under improved management to benefit biodiversity (hectares, qualitative assessment, non-certified)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 4.2 Area of landscapes under third-party certification incorporating biodiversity considerations

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Type/Name of Third Party Certification

Indicator 4.3 Area of landscapes under sustainable land management in production systems

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 4.4 Area of High Conservation Value or other forest loss avoided

Disaggregation Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 4.5 Terrestrial OECMs supported

Name of the OECMs	WDPA-ID	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)

Documents (Document(s) that justifies the HCVF)

Title

Indicator 5 Area of marine habitat under improved practices to benefit biodiversity (excluding protected areas)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 5.1 Fisheries under third-party certification incorporating biodiversity considerations

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)

Type/name of the third-party certification

Indicator 5.2 Large Marine Ecosystems with reduced pollution and hypoxia

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)

LME at PIF	LME at CEO Endorsement	LME at MTR	LME at TE

Indicator 5.3 Marine OECMs supported

Name of the OECMs	WDPA-ID	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)

Indicator 6 Greenhouse Gas Emissions Mitigated

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO_2e (direct)	0	0	0	0
Expected metric tons of CO_2e (indirect)	0	0	0	0

Indicator 6.1 Carbon Sequestered or Emissions Avoided in the AFOLU (Agriculture, Forestry and Other Land Use) sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO_2e (direct)				
Expected metric tons of CO_2e (indirect)				

Anticipated start year of accounting				
Duration of accounting				

Indicator 6.2 Emissions Avoided Outside AFOLU (Agriculture, Forestry and Other Land Use) Sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO_2e (direct)				
Expected metric tons of CO_2e (indirect)				
Anticipated start year of accounting				
Duration of accounting				

Indicator 6.3 Energy Saved (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Total Target Benefit	Energy (MJ) (At PIF)	Energy (MJ) (At CEO Endorsement)	Energy (MJ) (Achieved at MTR)	Energy (MJ) (Achieved at TE)
Target Energy Saved (MJ)				

Indicator 6.4 Increase in Installed Renewable Energy Capacity per Technology (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Technology	Capacity (MW) (Expected at PIF)	Capacity (MW) (Expected at CEO Endorsement)	Capacity (MW) (Achieved at MTR)	Capacity (MW) (Achieved at TE)

Indicator 7 Shared water ecosystems under new or improved cooperative management

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Shared water Ecosystem				
Count	0	0	0	0

Indicator 7.1 Level of Transboundary Diagonostic Analysis and Strategic Action Program (TDA/SAP) formulation and implementation (scale of 1 to 4; see Guidance)

Shared Water Ecosystem	Rating (Expected at PIF)	Rating (Expected at CEO Endorsement)	Rating (Achieved at MTR)	Rating (Achieved at TE)

Indicator 7.2 Level of Regional Legal Agreements and Regional management institution(s) (RMI) to support its implementation (scale of 1 to 4; see Guidance)

Shared Water Ecosystem	Rating (Expected at PIF)	Rating (Expected at CEO Endorsement)	Rating (Achieved at MTR)	Rating (Achieved at TE)

Indicator 7.3 Level of National/Local reforms and active participation of Inter-Ministeral Committees (IMC; scale 1 to 4; See Guidance)

Shared Water Ecosystem	Rating (Expected at PIF)	Rating (Expected at CEO Endorsement)	Rating (Achieved at MTR)	Rating (Achieved at TE)

Indicator 7.4 Level of engagement in IWLEARN throgh participation and delivery of key products(scale 1 to 4; see Guidance)

Shared Water Ecosystem	Rating (Expected at PIF)	Rating (Expected at CEO Endorsement)	Rating (Achieved at MTR)	Rating (Achieved at TE)

Indicator 8 Globally over-exploited fisheries moved to more sustainable levels

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)

Fishery Details

Indicator 9 Chemicals of global concern and their waste reduced

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)
0.00	0.00	0.00	0.00

Indicator 9.1 Solid and liquid Persistent Organic Pollutants (POPs) removed or disposed (POPs type)

POPs type	Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)

Indicator 9.2 Quantity of mercury reduced (metric tons)

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)

Indicator 9.3 Hydrochloroflurocarbons (HCFC) Reduced/Phased out (metric tons)

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)

Indicator 9.4 Number of countries with legislation and policy implemented to control chemicals and waste (Use this sub-indicator in addition to one of the sub-indicators 9.1, 9.2 and 9.3 if applicable)

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)

Indicator 9.5 Number of low-chemical/non-chemical systems implemented, particularly in food production, manufacturing and cities (Use this sub-indicator in addition to one of the sub-indicators 9.1, 9.2 and 9.3 if applicable)

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)

Indicator 9.6 POPs/Mercury containing materials and products directly avoided

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)

Indicator 9.7 Highly Hazardous Pesticides eliminated

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)

Indicator 9.8 Avoided residual plastic waste

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)

Indicator 10 Persistent organic pollutants to air reduced

Grams of toxic equivalent gTEQ (Expected at PIF)	Grams of toxic equivalent gTEQ (Expected at CEO Endorsement)	Grams of toxic equivalent gTEQ (Achieved at MTR)	Grams of toxic equivalent gTEQ (Achieved at TE)

Indicator 10.1 Number of countries with legislation and policy implemented to control emissions of POPs to air (Use this sub-indicator in addition to Core Indicator 10 if applicable)

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)

Indicator 10.2 Number of emission control technologies/practices implemented (Use this sub-indicator in addition to Core Indicator 10 if applicable)

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)

Indicator 11 People benefiting from GEF-financed investments

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)

Female	180	180		
Male	270	270		
Total	**450**	**450**	0	**0**

Explain the methodological approach and underlying logic to justify target levels for Core and Sub-Indicators (max. 250 words, approximately 1/2 page)

The proposed project will support the Capacity Building Initiative for Transparency (CBIT) of GEF-8 Climate Change Mitigation Focal Area Strategy. After completion of the project, Turkmenistan will be capable of building institutional and technical capacities to meet the ETF requirements in the Paris Agreement through (i) coordinated and strengthened national institutional effort on ETF, (ii) enhanced technical capacity of the stakeholders, and packaged set of tools for tracking the NDC adaptation actions, (iii) enhanced technical capacity of the stakeholders and packaged set of tools for the consistent GHG inventory preparation and tracking the NDC mitigation actions, and (iv) enhanced technical capacity of the stakeholders and packaged set of tools for tracking the climate finance (domestic and international) and support received for NDC actions.

The number of beneficiaries is estimated based on the number of staffs of key stakeholders engaged in project implementation (ministries, national agencies, business, NGO) in Turkmenistan. The targeted national agencies based on stakeholder's consultation (during inception workshop) are mentioned in the following list.

Direct Project beneficiaries

Stakeholder type: Project Executing Entity

- Scientific Information Center of the Interstate Commission on Sustainable Development (SIC ICSD). At least 10 people.

SIC ICSD implements coordination and management of regional cooperation in the field of environmental protection and sustainable development of the countries of Central Asia, including improving qualifications and gaining new knowledge in the field of assessing mitigation and adaptation measures, revising the NDC document based on the principles of transparency.

Stakeholder Type: National ministries

- Ministry of Environmental Protection of Turkmenistan (MoEP): At least 15 people.

UNFCCC Focal Point Coordination of activities on the implementation of the UNFCCC and the Paris Agreement in the country. Preparation of Biennial Update Reports and National Communications for the UNFCCC. Preparation and updating of NDCs. Awareness raising campaigns and trainings on PA objectives under the Article 6, 10, 13, etc. Capacity building on preparation of GHG inventory data, mitigation/adaptation impact assessments, climate finance.

- Ministry of Energy of Turkmenistan (MoEn): At least 15 people.

IPCC Sector. Awareness raising campaigns and trainings on PA objectives under the Article 6, 10, 13, etc. Capacity building on preparation of GHG inventory data, mitigation/adaptation impact assessments, climate finance

- Ministry of Construction and Architecture of Turkmenistan (MoCA): At least 10 people.

Awareness raising campaigns and trainings on PA objectives under the Article 6, 10, 13, etc. Capacity building on preparation of GHG inventory data, mitigation/adaptation impact assessments, climate finance

- Ministry of Finance and Economy of Turkmenistan (MoFE) - Department of Strategic and Sustainable Development, Department of Agro-Industrial Complex: At least 10 people.

Awareness raising campaigns and trainings on PA objectives under the Article 6, 10, 13, etc. Capacity building on mitigation/adaptation impact assessments, climate finance

- Ministry of Agriculture of Turkmenistan (MoA): At least 10 people. IPCC Sector.

Awareness raising campaigns and trainings on PA objectives under the Article 6, 10, 13, etc. Capacity building on preparation of GHG inventory data, mitigation/adaptation impact assessments.

- Ministry of Health and Medical Industry of Turkmenistan (MoHMT): At least 10 people.

Awareness raising campaigns and trainings on PA objectives under the Article 6, 10, 13, etc. Capacity building on mitigation/adaptation impact assessments, climate finance.

- Ministry of Foreign Affairs of Turkmenistan (MoFA): At least 15 people.

Awareness raising campaigns and trainings on PA objectives under the Article 6, 10, 13, etc. Capacity building on mitigation/adaptation impact assessments, climate finance.

- Mejlis of Turkmenistan: At least 15 people.

Awareness raising campaigns and trainings on PA objectives under the Article 6, 10, 13, etc. Capacity building on mitigation/adaptation impact assessments, climate finance.

Stakeholder Type: National agencies and state committees

- Agency of Transport and Communications under the Cabinet of Ministers of Turkmenistan (ATC) At least 10 people.

IPCC Sector. Awareness raising campaigns and trainings on PA objectives under the Article 6, 10, 13, etc. Capacity building on preparation of GHG inventory data, mitigation/adaptation impact assessments, climate finance

- State Committee for Water Resources of Turkmenistan (SCWR): At least 10 people.

Awareness raising campaigns and trainings on PA objectives under the Article 6, 10, 13, etc. Capacity building on preparation of GHG inventory data, mitigation/adaptation impact assessments, climate finance.

- State Committee on Statistics of Turkmenistan (SCS): At least 10 people.

Awareness raising campaigns and trainings on PA objectives under the Article 6, 10, 13, etc. Capacity building on preparation of GHG inventory data, mitigation/adaptation impact assessments, climate finance

Stakeholder Type: Government-owned companies

- State Corporation "Turkmenenergo"

- State Concern “Turkmengas”

- State Concern “Turkmennebit”

- State Concern “Turkmenhimiya”

At least 40 people.

IPCC Sector. Awareness raising campaigns and trainings on PA objectives under the Article 6, 10, 13, etc. Capacity building on preparation of GHG inventory data, mitigation/adaptation impact assessments, climate finance.

Stakeholder Type: Scientific organizations

- Academy of Sciences of Turkmenistan (Institute of Solar Energy)

- Scientific Research Agricultural Institute of the Ministry of Agriculture of Turkmenistan

- Turkmen Agricultural University named after. S.A.Niyazov

- Institute of Oil and Gas of the State Concern “Turkmengas”

- State Energy Institute of Turkmenistan

- International University of Oil and Gas named after Yagshygeldi Kakaev

- National Institute of Deserts, Flora and Fauna

At least 60 people.

Awareness raising campaigns and trainings on PA objectives under the Article 6, 10, 13, etc. Capacity building on preparation of GHG inventory data, mitigation/adaptation impact assessments, climate finance.

Stakeholder Type: Non-Governmental Organizations

- Women's Union of Turkmenistan
- Youth organization of Turkmenistan named after. Magtymguly
- Society for Nature Conservation of Turkmenistan
- Public organization “Eco Durmush”
- Public organization “Tebigy Kuvvat”

At least 30 people.

Awareness raising campaigns and trainings on PA objectives under the Article 6, 10, 13, etc. Capacity building on preparation of GHG inventory data, mitigation/adaptation impact assessments, climate finance.

Universities and Institutes for Higher Education:

- S.A. Niyazov Agriculture University,
- Dashoguz Agriculture Institute
- Magtymguly Turkmen State University.

180 people

Development of training and development for the students; institutionalizing tools for capacity development for the education of younger generation of specialist; who would be engaged in data collection activities, emission factors development, data quality assurance and reporting.

Key Risks

	Rating	Explanation of risk and mitigation measures
CONTEXT		
Climate	Low	Risk: No immediate risks presented during project lifetime. Although extreme climate events such as cyclones, may temporarily affect project execution. Mitigation: As thhis is a capacity building project and is targeting institutional and human capacities to comply with ETF reporting requirements of the Paris Agreement. As such, climate change impacts do not pose a risk to the project interventions or implementation. Nonetheless, established protocols and

		guidelines of the government and national institutions will be followed in case of any adverse climatic events.
Environmental and Social	Low	Risk: No environmental risks foreseen. Continuing COVID pandemic (or local outbreaks) may lead to lower engagement, fewer in-person meetings, and delays in project execution, particularly for those project partners where staffing and capacity are less available. Mitigation: In case of precautionary measures to counter potential pandemic or similar events, day-to-day project activities will be conducted considering work from home modality. In addition, the project will ensure the use of virtual platform, such as Zoom/MS Team for technical capacity building process, technical launch, validation, national consultation, and technical group meetings. Technical capacity building (e.g. training) activities will be recorded, uploaded and disseminated through information management system under the project.
Political and Governance	Low	Risk: Lack of coordination among ministries and local government. Mitigation measure: Specifying the roles and responsibilities of the national institutions supported by the project guidelines and arrangements. Risk: Possible government change resulting in a lack of political will to support the project activities. Mitigation measure: Reaching out to the decision-makers for awareness-raising through a strong stakeholder involvement plan. Emphasizing the national commitments under the UNCCC framework.
INNOVATION		
Institutional and Policy	Moderate	Risk: Even though the country has some baseline institutional arrangement initiatives and the national system for inventorying greenhouse gas emissions in Turkmenistan is organized on a centralized basis, using national experts; significant amount of development of institutional arrangements and knowledge base of the experts is still needed. Mitigation: This issue will be prioritized for addressing the remaining capacity development needs. Risk: High staff turnover affecting the developed capacity and sustainability of the project. Mitigation Measure: The project will focus on building capacity of a broad spectrum of stakeholders including government agencies, research institutions, and academia. This will help to mitigate the risk of high staff turnover. On the other hand, ToT program, established coordination mechanism, data management system, and established protocols will be institutionalized. The training materials and video will be disseminated through the established GHG information system. Hence, new staff will have the opportunity to be trained even after the project completion. Risk: The policy, legal and institutional reforms proposed under the project may not be approved, fully adopted and under implementation the government within the 3 years of the project, due to the short timescale and insufficient Government resources to ensure their approval and subsequent execution. Mitigation: The proposed project will follow the national strategies and plans.
Technological	Moderate	Risk: The data and information available may not be comparable with the proposed methodologies. Mitigation: Project is designed in a way to ensure

		successful implementation, building up on previous vast experience of FAO in the field.
Financial and Business Model	Moderate	Risk: The incapability of the government after the project cycle to fund the ETF related activities, Mitigation measure: Utilize the resources available with baseline projects, and exploring the South-South cooperation for potential investment.
EXECUTION		
Capacity	Moderate	Risk: High staff turnover affecting the developed capacity and sustainability of the project. Mitigation measure: The project will focus on building capacity of a broad spectrum of stakeholders including government agencies, research institutions, and academia. This will help to mitigate the risk of high staff turnover. On the other hand, ToT program, established coordination mechanism, data management system, and established protocols will be institutionalized. The training materials and video will be disseminated through the established GHG information system. Hence, new staff will have the opportunity to be trained even after the project completion.
Fiduciary	Low	Risk: Potential mismanagement of donor funds. Mitigation measure: Only partners which qualify through a fiduciary capacity assessment will be trusted with the execution role and the execution agreements will be designed to transfer the responsibility in tranches, to ensure quality delivery, continuous monitoring, course correction and adaptive management.
Stakeholder	Low	Risk: Gender mainstreaming hindered by resistance from local and national stakeholders. Mitigation Measure: Informing the key national stakeholders at the beginning regarding gender equality/representativeness as one of the key indicators of the project progress.
Other	Low	Risk: Limited cooperation on data and information sharing among stakeholders. Mitigation Measure: MoU and data-sharing agreement among key national stakeholders to collect, archive, and manage the data and information.
Overall Risk Rating	Low	The project has been developed as per the Government's request and the political will to benefit from the capacity building support that the project may provide and openness to cooperate of the relevant stakeholders; in order to be able to achieve compliance with the requirements from the Paris Agreement and the UNFCCC international convention has been evident.

C. ALIGNMENT WITH GEF-8 PROGRAMMING STRATEGIES AND COUNTRY/REGIONAL PRIORITIES

Explain how the proposed interventions are aligned with GEF- 8 programming strategies and country and regional priorities, including how these country strategies and plans relate to the multilateral environmental agreements.

For projects aiming to generate biodiversity benefits (regardless of what the source of the resources is - i.e., BD, CC or LD), please identify which of the 23 targets of the Kunming-Montreal Global Biodiversity Framework the project contributes to and explain how.

Confirm if any country policies that might contradict with intended outcomes of the project have been identified, and how the project will address this. (max. 500 words, approximately 1 page)

95. The proposed CBIT project is aligned with the Capacity Building Initiative for Transparency (CBIT) of GEF-8 and Climate Change Mitigation Focal Area programming directions. It is also aligned with the ETF requirements of Paris Agreement to support the countries institutional and technical capacity development for climate transparency.

96. Therefore, the proposed project agrees of the three aims of CBIT Program as mentioned below:
– Strengthen national institutions for transparency-related activities in line with national priorities;
– Provide relevant tools, training and assistance for meeting the provisions stipulated in Article 13 of the Agreement; and
– Assist in the improvement of transparency over time.

97. The outputs of the proposed CBIT project are in line with the requirements of MPGs as presented in Table below.

TABLE 3: ALIGNMENT OF PROPOSED CBIT PROJECT OUTPUTS WITH MPGS REQUIREMENTS.

Project outputs	**MPGs**	**Source [1][5]**
Output 1.1.1 Output 1.2.1 Output 2.1.1 Output 3.1.1	Mandatory requirement National inventory report of anthropogenic emissions by sources and removals by sinks of greenhouse gases. Information necessary to track progress made in implementing and achieving NDCs under Article 4 of the Paris Agreement (mitigation)	Part II, section B, para 18, p. 22 *Each Party should implement and maintain national inventory arrangements, including institutional, legal and procedural arrangements* for the continued estimation, compilation and timely reporting of national inventory reports in accordance with these MPGs. - Part III, section A, para 61, p. 27 *Each Party shall provide information on the institutional arrangements in place to track progress made in implementing and achieving its NDC* under Article 4, including those used for tracking internationally transferred mitigation outcomes, if applicable, along with any changes in institutional arrangements since its most recent biennial transparency report. Part III, section A, para 62, p. 28 *Each Party shall provide information on legal, institutional, administrative and procedural arrangements for domestic implementation, monitoring, reporting, archiving of information and stakeholder engagement* related to the implementation and achievement of its NDC under Article 4.4. Part II, section C, para 21, p. 23

		Each Party shall use methods from the IPCC guidelines referred to in paragraph 20 above. Each Party should make every effort to use a recommended method (tier level) for key categories in accordance with those IPCC guidelines. Part II, section C, para 24, p. 23 *Each Party is encouraged to use country-specific and regional emission factors and activity data*, where available, or to propose plans to develop them, in accordance with the good practice elaborated in the IPCC guidelines referred to in paragraph 20 above. Part II, section C, para 34, p. 24 *Each Party shall elaborate an inventory QA/QC plan* in accordance with the IPCC guidelines referred to in paragraph 20 above. - Part III, section C, para 75, p. 29 *Each Party shall provide a description of each methodology and/or accounting approach* used, as applicable for: […] (g) *Methodologies used to track progress arising from the implementation of policies and measures*;
Output 3.1.1 Output 3.1.2	Encouraged Information related to climate change impacts and adaptation under Article 7 of the Paris Agreement	Part IV, section F, para 112, p. 35 *Each Party should provide the following information, as appropriate, related to monitoring and evaluation: (c) Assessment of and indicators for, (i) how adaptation increased resilience and reduced impacts; (i) Transparency of planning and implementation*; Part IV, section F, para 112, p. 35 In order to enhance their adaptation actions and to facilitate reporting, as appropriate, each Party should *report on the establishment or use of domestic systems to monitor and evaluate the implementation of adaptation actions.* Parties *should report on approaches and systems for monitoring and evaluation,* including those in place or under development.
Output 1.3.1	Voluntary Information on financial, technology development and transfer and capacity-building support needed and received	Part VI, section C, para 134, p. 42 Developing country Parties *should provide, in a common tabular format, information on financial support received*, including, to the extent possible, and as available and as applicable. Part IV, section H, para 116, p. 36 Each Party *should provide the following information, as appropriate, related to cooperation, good practices, experience and lessons learned: Monitoring and evaluation.*

98. Project will support the government priorities deriving from its national policy documents and the obligations under the international agreements that it is a party of; such as the UN Framework Convention on Climate Change. 46. Turkmenistan is actively working with the global community to mitigate global climate change, and it is reflected by the ratification of the United Nations Framework Convention on Climate Change (UNFCCC) in 1995, Kyoto Protocol on 11 January 1999, and Paris Agreement on 20 October 2016 [2]. After the ratification of the UNFCCC, Turkmenistan assumed the following obligations:

- to periodically submit to the Convention Secretariat National Communications reports containing information on the entire range of actions and measures undertaken in the country to address the following issues: inventory of anthropogenic greenhouse gas emissions; development and implementation of measures leading to the limitation and reduction of greenhouse gas emissions; assessment of the impact of climate change on ecological systems and socio-economic conditions of society;

- to submit to the Parties of the UNFCCC the data on national annual inventory of anthropogenic emissions from sources and removals by sinks of greenhouse gases;

- to develop and implement national programs that contribute to the implementation of policies and measures to reduce greenhouse gas emissions;

- to provide Parties with scientific and technical information on climate research and best practices for adaptation to its changes;

- to comply with financial obligations for contributions to the regular budget of the UNFCCC.

99. The capacity development support that the project is also in line with enabling the Government of Turkmenistan to achieve its goals and priorities under various climate change-related legal and regulatory framework, such as:

100. ***National Strategy of Turkmenistan on Climate Change (NSTCC)***. The NSTCC is a key national document for the implementation of climate change activities, representing the government vision and strategic directions towards climate change. It sets the priorities for ensuring sustainable development. The focus was an effective and coordinated process of climate change adaptation of priority sectors; developing effective mitigation measures, that contribute to accelerating the country's low-carbon development and timely implementation of international commitments. According to the NSTCC, for the successful implementation of mitigation measures in the country, in connection with the signing of the Paris Agreement, it is necessary to provide a legislative framework for the development of the NDC, including a plan for its implementation. In accordance with the provisions of the Agreement, it is necessary to prepare a National Strategy for Low-carbon Development, a National Inventory System for greenhouse Gas Emissions and Effluents, and implement a set of Measures, Reporting and Verification (MOS / MRV). The NSTCC sets various tasks including: the improvement of hydrometeorological observations of weather and climate change; development and implementation of climate change adaptation and mitigation measures; measures to save fuel and energy resources and stabilize greenhouse gas emissions until 2030 through the use of energy efficient and energy saving technologies; increasing the level of scientific support and international cooperation.

101. Some of the recently adopted legal and regulatory framework are as follows:

- Constitution of Turkmenistan of May 18, 1992, as amended on 25 September 2020.
- The Law of Turkmenistan 'On Waste" (2015);
- The Law of Turkmenistan 'On Protection of Atmospheric Air" (2016);

- The Law of Turkmenistan 'On Environmental Safety";
- National Strategy of Turkmenistan on Climate Change (2019);
- The Law of Turkmenistan 'On Environmental Audit' (2019);
- The Law of Turkmenistan 'On Renewable Energy Sources' (2021);
- Law of Turkmenistan of March 13, 2021 "On Prevention and Liquidation of Emergency Situations";
- The Law of Turkmenistan of August 22, 2020, 261-VI "On International Humanitarian Aid in Emergency Situations";
- The Law of Turkmenistan 'On Nature Protection' of March 01, 2014. (with amendments and additions, adopted by the Law of Turkmenistan of 18.08.2015) (Articles 49, 50);
- The Law of Turkmenistan 'On Hydrometeorological Activity' (1999, amended and supplemented by Amendments introduced by Law of Turkmenistan No. 32-IV of 18.04.2009 and No. 149-IV of 26.11.2010) (Article 15);
- Water Code of Turkmenistan. Approved and enacted since January 1, 2017. (Articles 63, 96, 97).

102. During 2020-2021, the following laws, strategies and amendments have been adopted:

- Kigali Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer (adopted on August 22, 2020);
- The National Strategy for the Development of Renewable Energy in Turkmenistan for the Period up to 2030 (adopted on December 4, 2020);
- The Law of Turkmenistan 'On Renewable Energy Sources" (adopted on March 13, 2021).

It is also planned to consider the following laws & amendments, strategies and programs:

- The Law of Turkmenistan "On Climate Change";
- The Law of Turkmenistan "On Energy Efficiency and Energy Saving";
- New edition of the Land Code of Turkmenistan;
- Elaboration of regulatory legal acts on the development of the use of renewable energy sources in Turkmenistan.

103. The socio-economic development of Turkmenistan is carried out based on state programmes and plans. The main steps and actions taken by Turkmenistan to achieve the goals and objectives in the field of sustainable development were highlighted in the book of the National Leader of the Turkmen People "Turkmenistan is on the way to achieving the Sustainable Development Goals", presented at the 73rd session of the United Nations General Assembly and in the First Voluntary National Review of Turkmenistan.

104. Since the presentation of the First Voluntary National Review, systematic work has been carried out in the country to improve the nationalization of the SDGs. The list of national targets and indicators of the Sustainable Development Goals has been streamlined based on the activities carried out. As of 23 June 2022, in accordance with the List of amended, excluded and additional SDG' indicators, 136 targets and 180 indicators have been adopted in Turkmenistan, which will be implemented until 2030.

105. Turkmenistan has launched the process of implementing the SDGs from a good entry point due to the high level of integration of sustainable development goals and targets into national policy documents. Currently, the ultimate goal of the country's long-term development set out in all national policies, plans, concepts and other programmes that reflect the tasks laid down in the global Agenda until 2030, is to improve the standard of living and well-being of the population.

106. At the beginning of 2022, the country adopted a new long-term Programme "The Revival in the New Epoch of the Powerful State: National Programme of Socio-Economic Development of Turkmenistan, 2022–2052", where the achievement of the 2030 Agenda for Sustainable Development has an important place. The main goal of the National Programme is the formation of a new model for ensuring the harmonious and sustainable development of the national economy of Turkmenistan which is aimed at:

- ensuring the political, economic, social and cultural development of the country;
- further strengthening of the foundations of national independence and neutrality in the next thirty years;
- improvement of the public administration system in accordance with the changing conditions of the market economy;
- strengthening macroeconomic stability;
- improving the competitiveness of the national economy and strengthening its position at the level of sustainably developing countries of the world;
- increasing the level of industrialization of the national economy, enhancing the implementation of institutional reforms, digital economy and digital technologies, active development of the market economy, small and medium-sized enterprises, creation of an enabling business environment;
- further development of economic sectors based on knowledge, innovations, including economically and environmentally friendly technologies;
- innovative and sustainable development of the country's regions;
- ensuring environmental and food security, promoting the development of the "green economy";
- development of human capital, further improvement of living standards, social protection and employment of citizens;
- ensuring consistent implementation of the UN Sustainable Development Goals in Turkmenistan.

107. In 2022, "The Program of the President of Turkmenistan for the Socio-economic Development of the Country in 2022–2028" was adopted. The major objectives of this Programme were to ensure sustainable economic growth of the country, structural transformations of all sectors of the economy, the creation of a robust infrastructure, expanding integration into the global economic system, the introduction of innovations and digital systems in all production areas, increasing the role of private businesses.

108. *Integration of Sustainable Development Goals into national development programmes*. In view of its comprehensive nature, the 2030 Agenda stipulates the transformation of national policies, strategies, concepts and plans for the socio-economic development of the country. This, in turn, requires the incremental implementation of SDG objectives into national policy. Concurrently, in order to effectively integrate the principles of sustainable development into national policy, a systematic audit should be conducted.

109. In order to determine the relevance of the SDG applicability in the context of the country, three Rapid Integrated Assessments (hereinafter – RIA) of existing national programmes were conducted in 2017, 2019 and 2022 with the assistance of UNDP. During the first two assessments, the policy documents adopted in the period 2010–2019 were analyzed, the implementation period of which was mainly planned until 2020 inclusive. According to the results of the assessments, it was revealed that a high level of integration (conceptually) of the SDG targets was adopted by Turkmenistan in the current national policy documents, namely, 84% in 2017 and 85% in 2019.

110. In recent years, Turkmenistan has adopted a number of new long- and medium-term policy documents. In this regard, as part of the preparation to the National Voluntary Review, a third Rapid Integrated

Assessment was carried out in 2022. A rapid assessment of mapping the compliance of existing policies in Turkmenistan with the SDGs has shown that a level of integration of SDG targets into strategies, programmes and action plans remained as high as 85%. The assessment has shown that targets adopted by Turkmenistan are fully (100%) integrated in the following SDGs: 1–4, 7–9, 11, 13 and 17. For the rest of the goals, the current level of localization of SDG targets in the policy documents implemented by the country varies from 50% (SDG 10 – Reduce inequality within and among countries) to 88% (SDG 6 – Ensure availability and sustainable management of water and sanitation for all).

111. *Climate change-related baseline initiatives*: Several government-led and donor-financed projects are implemented in the country. Those most relevant, which have the potential to provide a baseline for the proposed CBIT project, are summarized below.

TABLE 4: BASELINE CLIMATE CHANGE-RELATED INITIATIVES WHICH CAN BE SUPPORTIVE OF THE PROPOSED CBIT PROJECT[3]

Activities	Responsible organizations	Implementation timeline and progress status
Preparation of the Fourth National Communication of Turkmenistan and the First Biennial Update Report under the UNFCCC	– Ministry of Environmental Protection – Ministry of Agriculture – sectoral departments – Global Environment Facility (GEF) – United Nations Environment Program(UNEP) – United Nations Development Program (UNDP) etc.	2020–2024 *(in progress)*
Conservation and Sustainable Management of Land Resources and High Nature Value Ecosystems in the Aral Sea Basin for Multiple Benefits	– Ministry of Environmental Protection – UNDP – GEF	2022-2026
Developing National Capacity of Turkmenistan through Improving Regulatory Environment towards Energy Efficient and Sustainable Building Sector	– Ministry of Environmental Protection – UNDP – GEF	2022-2027
Development of the National Adaptation Plan (NAP)	– Ministry of Environmental Protection – sectoral departments – private sector – Green Climate Fund (GCF) – UNDP – etc.	2021–2024 *(in process)*
Development and implementation of the Measurement, Reporting,and Verification (MRV) system for Nationally Determined Contributions (NDCs)	– Ministry of Environmental Protection – Ministry of Finance and Economy – State Committee on Statistics – sectoral departments – UNDP – GEF – GCF – etc.	2022–2026
Development of information, scientific and human potential inthe field of climate change	– Ministry of Environmental Protection	2022–2030

	– Ministry of Education – Academy of Sciences of Turkmenistan – public organizations – private sector – UNDP – UNEP – UNICEF – etc.	
Conducting the UNFCCC New Technology Needs Assessment (NTNA)	– Ministry of Environmental Protection – UNFCCC Secretariat – GEF – UNEP – UNDP – etc.	2022–2025
Establishment of the Climate Data Fund ofTurkmenistan	– Ministry of Environmental Protection, – State Committee on Statistics – Academy of Sciences of Turkmenistan – UNFCCC Secretariat – UNDP – UNEP – etc.	2022–2026
Preparation of the Fifth National Communicationof Turkmenistan under the UNFCCC	– Ministry of Environmental Protection – GEF – UNEP – UNDP – etc.	2024–2028
Development of the National Mitigation Plan (NPM)	– Ministry of Environmental Protection – other key agencies – private sector, – UNFCCC Secretariat, – GEF – UNDP – UNEP – etc.	2023–2029

[1] https://unfccc.int/sites/default/files/resource/CMA2018_03a02E.pdfhttps://unfccc.int/sites/default/files/resource/CMA2018_03a02E.pdf

[2] https://unfccc.int/node/61222https://unfccc.int/node/61222

[3] NDC of Turkmenistan

D. POLICY REQUIREMENTS

Gender Equality and Women's Empowerment

We confirm that gender dimensions relevant to the project have been addressed during Project Preparation as per GEF Policy and are clearly articulated in the Project Description (Section B).

Yes

1) Does the project expect to include any gender-responsive-measures to address gender gaps or promote gender equality and women's empowerment?

No

If the project expects to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment, please indicate in which results area(s) the project is expected to contribute to gender equality:

Closing gender gaps in access to and control over natural resources;

Improving women's participation and decision-making; and/or

No

Generating socio-economic benefits or services for women.

2) Does the project's results framework or logical framework include gender-sensitive indicators?

Yes

Stakeholder Engagement

We confirm that key stakeholders were consulted during Project Preparation as required per GEF policy, their relevant roles to project outcomes has been clearly articulated in the Project Description (Section B) and that a Stakeholder Engagement Plan has been developed before CEO endorsement**.**

Yes

Select what role civil society will play in the Project

Consulted only; Yes

Member of Advisory Body; Contractor;

Co-financier;

Member of project steering committee or equivalent decision-making body ; Yes

Executor or co-executor; Yes

Other (Please explain)

Private Sector

Will there be private sector engagement in the project?

Yes

And if so, has its role been described and justified in section B project description?

Yes

Environmental and Social Safeguards

We confirm that we have provided information regarding Environmental and Social risks associated with the proposed project or program, including risk screenings/ assessments and, if applicable, management plans or other measures to address identified risks and impacts (this information should be presented in Annex E).

Yes

Please provide overall Project/Program Risk Classification

Overall Project/Program Risk Classification

PIF	CEO Endorsement/Approval	MTR	TE
Low	Low		

E. OTHER REQUIREMENTS

Knowledge management

We confirm that an approach to Knowledge Management and Learning has been clearly described during Project Preparation in the Project Description and that these activities have been budgeted and an anticipated timeline for delivery of relevant outputs has been provided.

Yes

Socio-economic Benefits

We confirm that the project design has considered socio-economic benefits to be delivered by the project and these have been clearly described in the Project Description and will be monitored and reported on during project implementation (at MTR and TER).

The project will enhance the technical, organizational and institutional capacities to measure, monitor, plan, mitigate and adapt to climate change related developments. Thus, it will increase the capacity to support improved preparedness and resilience of the population; protecting against socio-economic and environmental shocks and stresses, loss and damage from extreme events and disasters. Such potential socio-economic benefits resulting from the project's implementation have been considered and emphasized during the project's design.

Throughout the project implementation, monitoring the process will involve consideration of the opportunities that are presented to the women and men for equally participating in project decision-making; equal respect, encouragement and support to women as decision-makers, implementers and participants. Also, monitoring of those involved in project implementation, to be continually motivated to maintain a gender perspective (opportunities will be presented to update their gender knowledge and skills, and discuss gender issues in a

non-judgemental environment). All indicators on human beings will be disaggregated by sex wherever possible, to identify the gender differentiated impact of the intervention.

Gender specialist recruited under the intervention will work closely with the project team and technical specialists to ensure that project activities and initiatives for capacity development are geared towards potential differential needs of women and men. Monitoring will also ensure that indicators are effective, integrate gender perspective and capture both quantitative and qualitative dimensions of the targets that also consider the situation and needs of both women and men.

ANNEX A: FINANCING TABLES

GEF Financing Table

Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	Grant / Non-Grant	GEF Project Grant($)	Agency Fee($)	Total GEF Financing ($)
FAO	GET	Turkmenistan	Climate Change	CBIT Set-Aside	Grant	1,776,485.00	168,765.00	1,945,250.00
Total GEF Resources ($)						**1,776,485.00**	**168,765.00**	**1,945,250.00**

Project Preparation Grant (PPG)

Was a Project Preparation Grant requested?

true

PPG Amount ($)

50000

PPG Agency Fee ($)

4750

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	PPG($)	Agency Fee($)	Total PPG Funding($)
FAO	GET	Turkmenistan	Climate Change	CBIT Set-Aside	50,000.00	4,750.00	54,750.00
Total PPG Amount ($)					**50,000.00**	**4,750.00**	**54,750.00**

Please provide Justification

Sources of Funds for Country Star Allocation

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Sources of Funds	Total($)
Total GEF Resources					**0.00**

Focal Area Elements

Programming Directions	Trust Fund	GEF Project Financing($)	Co-financing($)
CCM-CBIT	GET	1,776,485.00	1325400
Total Project Cost		**1,776,485.00**	**1,325,400.00**

Confirmed Co-financing for the project, by name and type

Please include evidence for each co-financing source for this project in the tab of the portal

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount($)
Recipient Country Government	Ministry of Environment Protection	In-kind	Recurrent expenditures	400000
GEF Agency	FAO	Grant	Investment mobilized	925400
Total Co-financing				**1,325,400.00**

Please describe the investment mobilized portion of the co-financing

The investment mobilized by the GEF Agency is relevant projects which will support the achievements of the CBIT project in Turkmenistan. These projects include the GCF Readiness project titled “Improving the capacity of Turkmenistan to access climate finance through capacity building and strategic frameworks”, FAO-Turkey Partnership Program funded project titled “Improving the efficiency of small ruminants’ production for reduction of the GHG emission intensity”; and the three Technical Cooperation Program projects funded by FAO’s own regular fund resources, which are titled as “Supporting Water Policy in Central Asian Agri-food Sector with Emphasis on Climate Change Impact”, “Developing digital solutions for sustainable pasture management” and “Enhancing Capacities for Climate-Resilient Water Management”.

ANNEX B: ENDORSEMENTS

GEF Agency(ies) Certification

GEF Agency Type	Date	Project Contact Person	Phone	Email
GEF Agency Coordinator	6/13/2024	Jeffery Griffin	00390657055680	Jeffrey.Griffin@fao.org
Project Coordinator		Kaan Evren Basaran	05078986087	Kaan.Basaran@fao.org

Record of Endorsement of GEF Operational Focal Point (s) on Behalf of the Government(s):

Please attach the Operational Focal Point endorsement letter(s) with this template.

Name of GEF OFP	Position	Ministry	Date (MM/DD/YYYY)
Berdi Berdiyev	Head of the Department of International Relations and Planning	Ministry of Environment Protection of Turkmenistan	9/2/2023
Nury Jumashov	Deputy Minister	Ministry of Environmental Protection of Turkmenistan	8/20/2024

ANNEX C: PROJECT RESULTS FRAMEWORK

Please indicate the page number in the Project Document where the project results and M&E frameworks can be found. Please also paste below the Project Results Framework from the Agency document.

Results framework	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
Objective: Strengthening Turkmenistan's national capacities to meet the enhanced transparency framework (ETF) for climate change mitigation and adaptation actions and support received for the sectors covered by nationally determined contributions (NDCs).							
Component 1: Strengthening national institutional arrangement and information management system to support the ETF compliance, and Long-term Low Emissions and Development Strategies (LT-LEDS) formulation.							
Outcome 1.1: Enhancing national institutional capacities for ETF compliance, and LT-LEDS formulation.							
Output 1.1.1 Established ETF roadmap, action plan and institutional arrangement for ETF compliance, and LT-LEDS formulation. Output 1.1.2 Formally established institutional arrangements and coordination procedures, developed and endorsed Terms of Reference (ToR) for the Biennial Transparency Report (BTR) preparation and	(i) Technical, institutional, and data gaps analysis report of the existing MRV system in Turkmenistan based on the Biennial Transparency Report Capacity Assessment Tool (BTRCAT) developed by FAO, and gender-inclusive institutional arrangement to comply with the ETF requirement.	--	A draft report is prepared.	Published report	Evidence of survey/interview with key stakeholders/ procedures/ TORs	Sufficient political and institutional support are received to implement recommendations.	SIC ICSD PMU
	(ii) Number of technical workshops and consultations on GAP analysis (involving senior and mid-level govt officials) for ensuring a gender-inclusive	--	At least 2 workshops and consultations	At least 6 workshops and consultations	Workshop and consultation report/ draft gap analysis report	Stakeholders have sufficient intrinsic and extrinsic motivation to engage.	SIC ICSD PMU

Results framework	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
submission, enhanced stakeholders technical capacity for the Article 6 of the Paris Agreement.	national ETF roadmap.						
	(iii) Formulating Turkmenistan's Roadmap and Action Plan for ETF (RAPETF) using associated tools developed by FAO and under global CBIT projects focusing on national organizations and their roles in formulating ETF reports.	--	Inter-ministerial agencies and other institutions identified for Roadmap and Action Plan.	Published Roadmap and Action Plan.	Status of national Roadmap and Action Plan containing summary/result of interviews and surveys with relevant line ministry/government agency staff.	Sufficient political and institutional support are received to implement recommendations.	SIC ICSD PMU
	(iv) Number of consultations (National Consultation, workshops) to validate and endorse the RAPETF.	--	At least 2 workshops and consultations	At least 6 workshops and consultations	Workshop and consultation report/ draft gap analysis report	Stakeholders have sufficient intrinsic and extrinsic motivation to engage.	SIC ICSD PMU
	(v) Number of identified institutional focal points formalized through a ministerial decree.	Designated institution focal point exists for some ministeries, but not sufficient for the national RAPETF.	Inter-ministerial agencies and other institutions are identified for assignment of focal points. At least 40% female focal points.	All the focal points along with their designation and roles description are included in RAPETF. At least 40% female focal points.	The Ministerial Decree	Sufficient political and institutional support are received to implement recommendations.	SIC ICSD PMU
	(vi) Number of established and formalized Technical Working Groups (TWGs) through ministerial decree on GHG inventory, adaptation, climate finance and support received (involving senior and mid-level govt officials).	Designated institution focal points exists for GHG inventory, but not for other issues such as climate finance.	Inter-ministerial agencies and other institutions are identified for TWGs.	All the focal points along with their designation and roles description are included in RAPETF for TWGs.	The Ministerial Decree	Sufficient political and institutional support are received to implement recommendations.	SIC ICSD PMU
	(vii) Number of consultations (National Consultation, workshops) to validate and endorse the institutional arrangements.	--	At least 2 workshops and consultations	At least 6 workshops and consultations	Workshop and consultation report/ draft gap analysis report	Stakeholders have sufficient intrinsic and extrinsic motivation to engage.	SIC ICSD PMU
	(viii) A ministerial decree formalizing the institutional arrangements and coordination is developed	--	A draft ministerial decree is prepared.	A ministerial decree is adopted.	The Ministerial Decree.	Sufficient political and institutional support are received to implement recommendations.	SIC ICSD PMU
Outcome 1.2: Enhancing information management system to support ETF compliance, and LT-LEDS formulation.							

Results framework	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
Output 1.2.1: Established information management system to support ETF compliance focused on GHG inventory, NDC tracking & progress, Climate Change Adaptation, Climate Finance, and LT-LEDS formulation.	(i) Technical, institutional, and data gaps analysis report of the existing information management system in Turkmenistan	--	A draft report is prepared.	Published report	Analysis Report	Sufficient political and institutional support are received to implement recommendations.	SIC ICSD PMU
	(ii) Formulating Turkmenistan's Roadmap and Action Plan for an information management system to support the ETF compliance, and LT-LEDS formulation with gender sensitive stakeholder mapping and role definition and terms of reference (ToRs)	--	Inter-ministerial agencies and other institutions identified for Roadmap, Action Plan, and LT-LEDS	Published Roadmap, Action Plan, and LT-LEDS	Status of national Roadmap, Action Plan and LT-LEDS containing summary/result of interviews and surveys with relevant line ministry/government agency staff.	Sufficient political and institutional support are received to implement recommendations.	SIC ICSD PMU
	(iii) Number of consultations (National Consultation, workshops) to validate and endorse the Roadmap and Action Plan for information management system	--	At least 2 workshops and consultations	At least 6 workshops and consultations	Workshop and consultation report/ draft gap analysis report	Stakeholders have sufficient intrinsic and extrinsic motivation to engage.	SIC ICSD PMU
	(iv) Number of operational integrated information management system to support ETF compliance, and LT-LEDS formulation	--	A draft operational integrated information management system developed	A final version of operational integrated information management system developed	Integrated information management system that is operational	Sufficient political and institutional support are received	SIC ICSD PMU
	(v) Number of knowledge materials on developed information management system using local language to raise stakeholder awareness.	--	At least 1 knowledge material on developed information management system using local language to raise stakeholder awareness	At least 2 knowledge materials on developed information management system using local language to raise stakeholder awareness	Drafted and published knowledge materials	Stakeholders have sufficient intrinsic and extrinsic motivation to engage.	SIC ICSD PMU
Outcome 1.3: Enhancing national capacities to track climate finance.							
Output 1.3.1 Enhanced stakeholder capacity for reporting climate finance (domestic and international).	(i) A capacity gap assessment report on climate finance and support received reporting developed by FAO	--	A draft report is prepared.	Published report	Published report	Sufficient political and institutional support are received to conduct assessment.	SIC ICSD PMU
	(ii) Guidelines and action plans for reporting national climate finance information	--	At least 1 draft guideline and 1 draft action plan for reporting national climate	At least 1 guideline and 1 action plan for reporting national climate finance information related to NDC	Guideline and action plan developed and published	Sufficient political and institutional support are received to implement recommendations.	SIC ICSD PMU

Results framework	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
	related to NDC actions at national, sub-national, program, and project levels developed by FAO		finance information related to NDC actions at national, sub-national, program, and project levels prepared.	actions at national, sub-national, program, and project levels published.			
	(iii) Number of gender-sensitive trainings on tracking climate finance following the ToT model involving NGOs and private sectors.	--	At least 2 gender-sensitive trainings	At least 4 gender-sensitive trainings	Number of participants/training workshop materials/ workshop proceedings/recorded workshop lecture	Stakeholders have sufficient intrinsic and extrinsic motivation to engage.	SIC ICSD PMU
	(iv) Number of knowledge materials on MPGs of ETF reporting for climate finance using local language to raise stakeholder awareness.	--	At least 1 knowledge material on MPGs of ETF reporting for climate finance using local language to raise stakeholder awareness.	At least 2 knowledge materials on MPGs of ETF reporting for climate finance using local language to raise stakeholder awareness	Drafted and published knowledge materials	Stakeholders have sufficient intrinsic and extrinsic motivation to engage.	SIC ICSD PMU
Outcome 1.4: Enhancing national capacity and knowledge on modalities, procedures, guidelines (MPGs), and reporting formats of the ETF.							
Output 1.4.1 Enhanced stakeholder capacity and knowledge of MPGs and ETF reporting.	(i)(a) Number of technical capacity building training workshops on MPGs of ETF reporting following the Training of Trainers (ToT) model (involving senior and mid-level govt officials).	--	At least 2 workshops	At least 6 workshops	Number of participants/training workshop materials/ workshop proceedings/recorded workshop lecture	Stakeholders have sufficient intrinsic and extrinsic motivation to engage.	SIC ICSD PMU
	(i)(b) Number of staff (40% women) demonstrating sufficient knowledge and technical skills on MPGs of ETF reporting.	-	At least 25 (40% women)	At least 50 (40% women)	Training assessment surveys	Staff turnover will not undercut capacity development.	SIC ICSD PMU
	(ii) Number of knowledge materials on ETF requirements, processes, and procedures using local language to raise stakeholder awareness.	--	At least 2 knowledge materials on ETF requirements, processes and procedures	At least 4 knowledge materials on ETF requirements, processes and procedures	Drafted knowledge materials	Stakeholders have sufficient intrinsic and extrinsic motivation to engage.	SIC ICSD PMU
	(iii) Number of technical capacity building training to formulate the National Inventory based on the Common Reporting Tables (CRT) for BTR	--	At least 1 workshop	At least 2 workshops	Number of participants/training workshop materials/ workshop proceedings/recorded workshop lecture (disaggregated by sex)	Stakeholders have sufficient intrinsic and extrinsic motivation to engage.	SIC ICSD PMU
Component 2: Strengthening national technical capacity for GHG inventory preparation and monitoring and reporting NDC climate change mitigation actions.							

Results framework	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
Outcome 2.1: Enhancing technical capacity for reporting and data collection, methodologies, guidelines, and protocols, including quality assurance and quality control (QA/QC) processes and full integration of the sectoral data on GHG emissions inventory for BTR reporting.							
Output 2.1.1: Enhanced technical capacity for estimating and reporting GHG emissions	(i) (a) Number of gender-sensitive trainings on 2006 IPCC Guidelines, 2019 refinements and reporting for Energy, Industrial Processes and Product Use (IPPU), and Waste sectors following the ToT model.	--	At least 4 trainings	At least 8 trainings	Gender disaggregated number of participants/training workshop materials/ workshop proceedings/recorded workshop lecture	Stakeholders have sufficient intrinsic and extrinsic motivation to engage.	SIC ICSD PMU
	(i)(b) Number of staff (40% women) demonstrating sufficient knowledge and technical skills on 2006 IPCC Guidelines, 2019 refinements and reporting for Energy, Industrial Processes and Product Use (IPPU), and Waste sectors following the ToT model.	-	At least 25 (40% women)	At least 50 (40% women)	Training assessment surveys	Staff turnover will not undercut capacity development.	SIC ICSD PMU
	(ii) (a) Number of gender-sensitive trainings on spatial analysis of GHG emission through gender-sensitive training on land-use change analysis following the ToT model.	--	At least 2 training	At least 4 trainings	Number of participants/training workshop materials/ workshop proceedings/recorded workshop lecture	Stakeholders have sufficient intrinsic and extrinsic motivation to engage.	SIC ICSD PMU
	(ii)(b) Number of staffs (40% women) demonstrating sufficient knowledge and technical skills on spatial analysis of GHG emission through gender-sensitive training on land-use change analysis following the ToT model.	-	At least 25 (40% women)	At least 50 (40% women)	Training assessment surveys	Staff turnover will not undercut capacity development.	SIC ICSD PMU
	(iii) (a) Number of gender-sensitive trainings on GHG inventory preparation of AFOLU sectors based on 2006 IPCC Guidelines, and 2019 refinements following the ToT model.	--	At least 2 trainings	At least 4 trainings	Number of participants/training workshop materials/ workshop proceedings/recorded workshop lecture	Stakeholders have sufficient intrinsic and extrinsic motivation to engage.	SIC ICSD PMU

Results framework	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
	(iii)(b) Number of staff (40% women) demonstrating sufficient knowledge and technical skills on GHG inventory preparation of AFOLU sectors based on 2006 IPCC Guidelines, and 2019 refinements following the ToT model.	-	At least 25 (40% women)	At least 50 (40% women)	Training assessment surveys	Staff turnover will not undercut capacity development.	SIC ICSD PMU
	(iv) Gender disaggregated number of students of S.A. Niyazov Agriculture University, Dashoguz Agriculture Institute and Magtymguly Turkmen State University participated in technical capacity enhancement on spatial analysis and GHG inventory preparation based on 2006 IPCC Guidelines		At least 50 (40% women)	At least 100 (40% women)	Number of participants/training workshop materials/ workshop proceedings/recorded workshop lecture	Stakeholders have sufficient intrinsic and extrinsic motivation to engage.	SIC ICSD PMU
	(v) Number of knowledge materials on MPGs of ETF reporting using Common Reporting Tables of the BTR for GHG inventory and tracking NDC actions on climate change mitigation using the local language.	--	At least 1 knowledge material on MPGs of ETF reporting using Common Reporting Tables of the BTR for GHG inventory and tracking NDC actions on climate change mitigation using the local language.	At least 2 knowledge materials on MPGs of ETF reporting using Common Reporting Tables of the BTR for GHG inventory and tracking NDC actions on climate change mitigation using the local language.	Drafted and published knowledge materials	Stakeholders have sufficient intrinsic and extrinsic motivation to engage.	SIC ICSD PMU
	(vi) Assessment report on methane emissions situation in Turkmenistan		A draft report is prepared.	Finalized report	The finalized report	Sufficient political and institutional support are received	SIC ICSD PMU
	(vii) Analytical report on global experience of 'best practices' in reducing methane emissions and issues related to the Global Methane Pledge.		A draft report is prepared.	Finalized report	The finalized report	Sufficient political and institutional support are received	SIC ICSD PMU

Results framework	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
	(viii) Number of consultations on strengthening national capacity for inventory the methane emissions in priority sectors.		At least 2 consultations	At least 4 consultations	Consultation reports	Stakeholders have sufficient intrinsic and extrinsic motivation to engage.	SIC ICSD PMU
	(ix) Number of consultations for conducting an awareness raising campaign on methane emissions reduction.		At least 1 consultation	At least 2 consultations	Consultation report	Stakeholders have sufficient intrinsic and extrinsic motivation to engage.	SIC ICSD PMU
Component 3: Strengthening national technical capacity to monitor and report NDC climate change adaptation actions, as well as loss and damage.							
Outcome 3.1: Strengthened capacity to monitor, evaluate, and report on climate change impacts, vulnerabilities and risks, and adaptation-related activities, as well as loss and damage.							
Output 3.1.1 Enhanced national technical capacity for monitoring and reporting NDC climate change adaptation actions	(i) Capacity gap assessment report on the existing system for M&E of climate change impacts, risks and vulnerabilities of NDC prioritized sectors.	--	1 drafted report.	1 finalized report	Evidence of agreements/ procedures/ TORs/drafting of the report	Sufficient political and institutional support are received to implement recommendations.	SIC ICSD PMU
	(ii) Number of National Consultations on conducted capacity gap assessment	--	At least 1 consultation	At least 2 consultations	Consultation report/ draft gap analysis report	Stakeholders have sufficient intrinsic and extrinsic motivation to engage.	SIC ICSD PMU
	(iii) Guideline and action plan on M&E of NDC adaptation actions at national, sub-national, programme and project levels.	--	1 drafted guideline and 1 drafted action plan.	1 operational guideline and 1 operational action plan.	Evidence of agreements/ procedures/ TORs/drafting of the report	Sufficient political and institutional support are received to implement recommendations.	SIC ICSD PMU
	(iv)(a) Number of gender-sensitive training on tracking climate change adaptation actions of NDC involving NGOs and private sectors following ToT model (involving senior and mid-level govt officials).	--	At least 2 workshops	At least 6 workshops	Gender disaggregated number of participants/training workshop materials/ workshop proceedings/recorded workshop lecture	Stakeholders have sufficient intrinsic and extrinsic motivation to engage.	SIC ICSD PMU
	(iv)(b) Number of staffs (40% women) demonstrating sufficient knowledge and technical skills on tracking climate change adaptation actions of NDC.	-	At least 25 (40% women)	At least 50 (40% women)	Training assessment surveys	Staff turnover will not undercut capacity development.	SIC ICSD PMU

Results framework	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
	(v) Number of knowledge materials on MPGs of ETF reporting for adaptation using local language to raise stakeholder's awareness.	--	At least 2 knowledge materials.	At least 4 knowledge materials.	Drafted knowledge materials	Stakeholders have sufficient intrinsic and extrinsic motivation to engage.	SIC ICSD PMU
Output 3.1.2 Enhanced national technical capacity for monitoring and reporting loss and damage	(i) Number of established and formalized Inter-agency Working Groups (IWG) and associated ToR on Loss and damage to harmonize existing national methodologies for assessing loss and damage.	--	Inter-ministerial agencies and other institutions are identified for IWG.	All the focal points along with their designation and roles description are included in established IWG.	Evidence of agreements/ procedures/ TORs	Sufficient political and institutional support are received to establish the working group.	SIC ICSD PMU
	(ii) Background document and number of knowledge materials on current institutional framework and existing methodologies on loss and damage.	--	1 drafted background document and 1 drafted knowledge material on current institutional framework and existing methodologies on loss and damage.	1 finalized background document and 1 finalized knowledge material on current institutional framework and existing methodologies on loss and damage.	Drafted report and the background document	Sufficient political and institutional support are received to carry out analysis and finalize report.	SIC ICSD PMU
	(iii) An updated version of the FAO loss and damage methodology for the NDC sectors focusing on Turkmenistan	--	1 drafted updated version of the FAO loss and damage methodology	1 operational updated version of the FAO loss and damage methodology	Operational updated methodology	Sufficient political and institutional support are received to implement recommendations.	SIC ICSD PMU
	(iv)(a) Number of gender-sensitive training on the FAO loss and damage methodology for the NDC sectors focusing on Turkmenistan	--	At least 2 workshops	At least 4 workshops	Number of participants/training workshop materials/ workshop proceedings/recorded workshop lecture	Stakeholders have sufficient intrinsic and extrinsic motivation to engage.	SIC ICSD PMU
	(iv)(b) Number of staffs (40% women) demonstrating sufficient knowledge and technical skills of the FAO loss and damage methodology for the NDC sectors focusing on Turkmenistan	-	At least 25 (40% women)	At least 50 (40% women)	Training assessment surveys	Staff turnover will not undercut capacity development.	SIC ICSD PMU
	(v) Number of protocols for collecting, verifying, transmitting, aggregating data on loss and damage for transparent	-	1 drafted protocol	1 operational protocol	Evidence of agreements/ procedures/ TORs/drafting of the report	Sufficient political and institutional support are received to implement recommendations.	SIC ICSD PMU

Results framework	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
	reporting and integrating with the output 1.2.1.						
Component 4: Monitoring and evaluation.							
Outcome 4.1: Monitoring and evaluation of global environmental benefits (GEBs).							
Output 4.1.1: Mid-term review and final evaluation conducted, in addition to the preparation of periodic progress reports.	i) Progress Reports (Porgress Report, Annual PIR.)	-	At least 2 Reports	At least 3 Project Implementation Report as GEF requirement			PMU, FAO
	ii)Mid-Term Review (optional)	-	1 Mid-Term Review Report		MidTerm Review Report, BTORs of missions, ToR of M&E experts		FAO
	iii) Terminal Evaluation	-		1 Terminal Evaluation Report	Terminal Evaluation Report, ToRs of experts,		FAO

ANNEX D: STATUS OF UTILIZATION OF PROJECT PREPARATION GRANT (PPG)

Provide detailed funding amount of the PPG activities financing status in the table below:

Project Preparation Activities Implemented	GETF/LDCF/SCCF Amount ($)		
	Budgeted Amount	Amount Spent To date	Amount Committed
Financial Management/analyst	2,400.00	274.00	1,141.00
ETF Specialist	8,400.00	12,150.00	0.00
Adaptation Specialist	8,400.00	7,087.00	0.00
Consultancy processing costs	0.00	1,404.00	0.00
GEF Project Design expert	18,000.00	12,952.00	3,159.00
Translation Costs	4,300.00	1,421.00	0.00
Capacity Assessment	0.00	4,275.00	0.00
Inception Workshop	2,880.00	2,050.00	0.00
PSC and stakeholder meetings	2,740.00	0.00	0.00
Final Workshop	2,880.00	0.00	0.00
Total	**50,000.00**	**41,613.00**	**4,300.00**

ANNEX E: PROJECT MAP AND COORDINATES

Please provide geo-referenced information and map where the project interventions will take place

Location Name	Latitude	Longitude	GeoName ID
Ashgabat	37.95	58.3833	

Location Description:

Activity Description:

Please provide any further geo-referenced information and map where project interventions are taking place as appropriate.

37.95, 58.38333 https://www.geonames.org/162183/ashgabat.html

ANNEX F: ENVIRONMENTAL AND SOCIAL SAFEGUARDS SCREEN AND RATING

Attach agency safeguard datasheet/assessment report(s), including ratings of risk types and overall project/program risk classification as well as any management plans or measures to address identified risks and impacts (as applicable).

Title
Full ES Risk Screening checklist for project 737162_Turkmenistan11070

ANNEX G: BUDGET TABLE

Please upload the budget table here.

GCP.TUK.11070.GFF
_CBIT_Budget_v4.xls:

Please explain any aspects of the budget as needed here

Description	Unit	No. of units	Unit cost	Total	Component 1:	Component 2:	Component 3:	Component 4: M&E	PMC	TOTAL GEF	SIC ICSD IFAS	FAO managed	Year 1	Year 2	Year 3	TOTAL GEF
5570 International Consultants & National Consultants																
GHG Inventory Specialist in Energy Sector	days	60	500	30,000	10,000	10,000	10,000	-	-	30,000	30,000	-	10,000	10,000	10,000	30,000
GHG Inventory Specialist in IPPU Sector	days	60	500	30,000	10,000	10,000	10,000	-	-	30,000	30,000	-	10,000	10,000	10,000	30,000
GHG Inventory Specialist in Agriculture Sector	days	60	500	30,000	10,000	10,000	10,000	-	-	30,000	30,000	-	10,000	10,000	10,000	30,000
GHG Inventory Specialist in LULUCF Sector	days	60	500	30,000	10,000	10,000	10,000	-	-	30,000	30,000	-	10,000	10,000	10,000	30,000
GHG Inventory Specialist in Waste Sector	days	60	500	30,000	10,000	10,000	10,000	-	-	30,000	30,000	-	10,000	10,000	10,000	30,000
ETF Specialist	days	90	500	45,000	15,000	15,000	15,000			45,000	45,000		15,000	15,000	15,000	45,000
MRV Specialist	days	90	500	45,000	15,000	15,000	15,000			45,000	45,000		15,000	15,000	15,000	45,000
Loss and Damage Specialist	days	60	500	30,000	10,000	10,000	10,000			30,000	30,000		10,000	10,000	10,000	30,000
Methane Emissions Specialist	days	60	500	30,000	10,000	10,000	10,000			30,000	30,000		10,000	10,000	10,000	30,000
Data Management and Information System Specialist	days	60	500	30,000	10,000	10,000	10,000	-	-	30,000	30,000	-	10,000	10,000	10,000	30,000
Institutional Arrangement expert	days	64	500	32,000	32,000		-	-		32,000	32,000	-	10,667	10,667	10,667	32,000
Sub-total international Consultants				**362,000**	**142,000**	**110,000**	**110,000**	-	**0**	**362,000**	**362,000**	-	**120,667**	**120,667**	**120,667**	**362,000**
National consultants																
Technical Project Coordinator	months	36	2,000	72,000	21,834	21,834	21,834	-	6,498	72,000	72,000	-	24,000	24,000	24,000	72,000
National GHG inventory and MRV expert	months	25	2,000	50,000	-	50,000	-	-		50,000	50,000	-	16,667	16,667	16,667	50,000
National data & Information Management System Digital Specialist	months	16	2,000	32,000	10,667	10,667	10,667	-		32,000	32,000	-	10,667	10,667	10,667	32,000
National M&E and KM Officer	months	16	2,000	32,000	-	-	32,000	-		32,000	32,000	-	10,667	10,667	10,667	32,000
National Gender expert	months	10	1,850	18,500	6,167	6,167	6,167	-		18,500	18,500	-	6,167	6,167	6,167	18,500
Finance/Admin Associate	months	34	1,500	51,000				-	51,000	51,000	51,000		17,000	17,000	17,000	51,000
Operations/Project support Officer	months	36	2,000	72,000	-	-	-	-	72,000	72,000	72,000	-	24,000	24,000	24,000	72,000
National OPA Reporting and Monitoring Specialist	months	15	2,000	30,000				10,000	20,000	30,000	30,000		10,000	10,000	10,000	30,000
National Fudiciary Support Specialist	months	15	2,000	30,000				22,000	8,000	30,000	30,000		10,000	10,000	10,000	30,000
Sub-total national Consultants				**387,500**	**38,667**	**88,667**	**70,667**	**32,000**	**157,498**	**387,500**	**387,500**	-	**129,167**	**129,167**	**129,167**	**387,500**
5570 Total consultants				**749,500**	**180,667**	**198,667**	**180,667**	**32,000**	**157,498**	**749,500**	**749,500**	-	**249,833**	**249,833**	**249,833**	**749,500**
5650 Contracts										-						
Gender analysis and framework to mainstream gender aspects	lumpsum	1	35,000	35,000	35,000	-	-	-	-	35,000	35,000	-	35,000	-	-	35,000
Turkmenistan's Information Management System development to support ETF requirements	lumpsum	1	106,985	106,985	96,287	10,699		-	-	106,985	106,985	-	35,662	35,662	35,662	106,985
Organizing national training sessions, meetings, PSC etc. and project start-up, mid-term and closing workshops (venue, catering, meeting materials, participants travel costs); communication materials; other relevant activities	lumpsum	1	100,000	100,000	33,333	33,333	33,333	-	-	100,000	100,000	-	33,333	33,333	33,333	100,000
Service contracts to Capacity GAP analysis, development training materials, knowledge materials, guidelines, protocols, action plan, etc.	lumpsum	1	90,000	90,000	30,000	30,000	30,000	-	-	90,000	90,000	-	30,000	30,000	30,000	90,000
Service contract on translation to the local language.	lumpsum	1	30,000	30,000	10,000	10,000	10,000	-	-	30,000	30,000	-	10,000	10,000	10,000	30,000
Audit-on the spot check cost	lumpsum	1	45,000	45,000	15,000	15,000	15,000			45,000	45,000		15,000	15,000	15,000	45,000
Inception workshop and OPA preperatory studies	lumpsum	1	12,000	12,000	4,000	4,000	4,000			12,000	12,000	-	12,000			12,000
Mid-term review (MTR)	lumpsum	1	14,000	14,000	-	-	-	14,000	-	14,000		14,000	-	14,000	-	14,000
Final Evaluation (FE)	lumpsum	1	44,000	44,000	-	-	-	44,000	-	44,000		44,000	-	-	44,000	44,000
Terminal Report	lumpsum	1	10,000	10,000	-	-	-	10,000	-	10,000		10,000	-	-	10,000	10,000
5650 Sub-total Contracts				**486,985**	**223,620**	**103,032**	**92,333**	**68,000**	-	**486,985**	**418,985**	**68,000**	**170,995**	**137,995**	**177,995**	**486,985**
5900 Travel																
International travel	trip	20	4,500	90,000	30,000	30,000	30,000	-		90,000	90,000	-	30,000	30,000	30,000	90,000
International travel (Activity 3.1.2.5)	trip	1	34,000	34,000	-	-	34,000	-	-	34,000	34,000	-	-	34,000	-	34,000
National Travel	trip	20	900	18,000	6,000	6,000	6,000	-	-	18,000	18,000	-	6,000	6,000	6,000	18,000
5900 Sub-total travel				**142,000**	**36,000**	**36,000**	**70,000**	-	-	**142,000**	**142,000**	-	**36,000**	**70,000**	**36,000**	**142,000**
5023 Training and workshops																
Technical Launch Workshop	lumpsum	1	5,000	5,000	2,000	2,000	1,000	-	-	5,000	5,000	-	5,000	-	-	5,000
Workshops and consultations on gap assessment to support the ETF requirement and LT-LEDS formulation (Activity 1.1.1.2).	lumpsum	6	4,000	24,000	24,000	-	-	-	-	24,000	24,000	-	12,000	12,000	-	24,000
Consultation (National Consultation and workshops) to validate and endorse the RAPETF (Activity 1.1.1.4)	lumpsum	6	5,000	30,000	30,000	-	-	-	-	30,000	30,000	-	15,000	15,000	-	30,000
Gender-sensitive training on tracking climate finance (Activity 1.3.1.3)	lumpsum	4	5,000	20,000	20,000	-	-	-	-	20,000	20,000	-	6,667	6,667	6,667	20,000
Technical capacity-building training workshops on MPGs of ETF reporting (Activity 1.4.1.1)	lumpsum	6	5,000	30,000	30,000	-	-	-	-	30,000	30,000	-	10,000	10,000	10,000	30,000
Technical capacity building training to formulate the National Inventory based on the Common Reporting Tables (CRT) for BTR (Activity 1.4.1.3)	lumpsum	2	5,000	10,000	10,000	-	-	-	-	10,000	10,000	-	3,333	3,333	3,333	10,000
Gender-sensitive training on 2006 IPCC Guidelines, 2019 refinements and reporting for Energy, Industrial Processes and Product Use (IPPU), and Waste sectors (Activity 2.1.1.1)	lumpsum	8	5,000	40,000	-	40,000	-	-	-	40,000	40,000	-	13,333	13,333	13,333	40,000
Gender-sensitive training on land-use change and spatial analysis (Activity 2.1.1.2)	lumpsum	4	5,000	20,000	-	20,000	-	-	-	20,000	20,000	-	-	10,000	10,000	20,000
Gender-sensitive training on GHG inventory preparation of AFOLU sectors based on 2006 IPCC Guidelines, and 2019 refinements(Activity 2.1.1.3).	lumpsum	4	5,000	20,000	-	20,000	-	-	-	20,000	20,000	-	6,667	6,667	6,667	20,000
Workshop on enhancing technical capacity on spatial analysis and GHG inventory preparation based on 2006 IPCC Guidelines for the students of S.A. Niyazov Agriculture University, Dashoguz Agriculture Institute and Magtymguly Turkmen State University (Activity 2.1.1.4)	lumpsum	2	5,000	10,000	-	10,000	-	-	-	10,000	10,000	-	10,000	-	-	10,000
Gender-sensitive training on tracking NDC climate change adaptation actions (Activity 3.1.1.4)	lumpsum	2	5,000	10,000	-	-	10,000	-	-	10,000	10,000	-	5,000	5,000	-	10,000
Gender-sensitive training on developed an updated version of the FAO loss and damage methodology for the NDC sectors (Activity 3.1.2.4)	lumpsum	2	5,000	10,000	-	-	10,000	-	-	10,000	10,000	-	-	5,000	5,000	10,000
Ad-hoc trainings and experince sharing cross-visit (e.g. trainig orgaized by IPCC, UNFCCC, and other reginal countries working on enhancing climate transparancy) (Relevant to Activity 1.4.1.1, 2.1.1.2, 2.1.1.3, 3.1.1.4)	lumpsum	4	5,000	20,000	6,667	6,667	6,667	-	-	20,000	20,000	-	-	10,000	10,000	20,000
PSC meetings	lumpsum	5	2,200	11,000	11,000	-	-	-	-	11,000	11,000	-	3,667	3,667	3,667	11,000
Project Results Technical Evaluation Workshop	lumpsum	1	5,000	5,000	2,000	2,000	1,000	-	-	5,000	5,000	-	-	-	5,000	5,000
5023 Sub-total training				**265,000**	**135,667**	**100,667**	**28,667**	-	-	**265,000**	**265,000**	-	**90,667**	**100,667**	**73,667**	**265,000**
6000 Expendable procurement																
IT equipment/Software	lumpsum	1	30,000	30,000	10,000	10,000	10,000	-	-	30,000	30,000	-	10,000	10,000	10,000	30,000
Communication and awareness raising materials	lumpsum	1	20,000	20,000	6,667	6,667	6,667	-	-	20,000	20,000	-	6,667	6,667	6,667	20,000
Office furniture and IT accessories	lumpsum	1	15,000	15,000	5,000	5,000	5,000	-	-	15,000	15,000	-	7,500	7,500	-	15,000
6000 Sub-total expendable procurement				**65,000**	**21,667**	**21,667**	**21,667**	-	-	**65,000**	**65,000**	-	**24,167**	**24,167**	**16,667**	**65,000**
6100 Non-expendable procurement																
Communication equipment (cameras, palmtops, etc)	lumpsum	1	10,000	10,000	3,333	3,333	3,333			10,000	10,000	-	3,333	3,333	3,333	10,000
Printers & Photocopier	lumpsum	1	10,000	10,000	3,500	3,500	3,000			10,000	10,000	-	10,000	-	-	10,000
Laptops	PCs	6	2,000	12,000	4,000	4,000	4,000			12,000	12,000	-	12,000	-	-	12,000
6100 Sub-total non-expendable procurement				**32,000**	**10,833**	**10,833**	**10,333**	-	-	**32,000**	**32,000**	-	**25,333**	**3,333**	**3,333**	**32,000**
6300 GOE budget																
Office operation (stationeries, internet, office transportataion costs, & other utilities, etc) for the project	months	36	1,000	36,000	12,000	12,000	12,000	-		36,000	36,000	-	12,000	12,000	12,000	36,000
6300 Sub-total GOE budget				**36,000**	**12,000**	**12,000**	**12,000**	-	-	**36,000**	**36,000**	-	**12,000**	**12,000**	**12,000**	**36,000**
TOTAL				**1,776,485**	**620,454**	**482,866**	**415,667**	**100,000**	**157,498**	**1,776,485**	**1,708,485**	**68,000**	**608,995**	**597,995**	**569,495**	**1,776,485**

ANNEX I: RESPONSES TO PROJECT REVIEWS

From GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF.