

GEF-8 REQUEST FOR MSP (1-STEP) APPROVAL

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General Project Information

Project Information

Project Title:

Strengthening the National Framework for Climate Transparency of Panama

Region:

Panama

GEF Project ID:

11497

Country(ies):

Panama

Type of Project:

MSP

GEF Agency(ies):

UNEP

GEF Agency Project ID:

Project Executing Entity(s):

Wetlands International

Project Executing Type:

CSO

GEF Focal Area (s):

Climate Change

Submission Date:

2/6/2024

Type of Trust Fund:

GET

Project Duration (Months):

36

GEF Project Grant: (a)

1,500,000.00

GEF Project Non-Grant: (b)

0.00

Agency Fee(s) Grant: (c)

142,500.00

Agency Fee(s) Non-Grant (d)

0.00

Total GEF Financing: (a+b+c+d)

1,642,500.00

Total Co-financing

421,360.00

PPG Amount: (e)

50,000.00

PPG Agency Fee(s): (f)

4,750.00

PPG total amount: (e+f)

54,750.00

Total GEF Resources: (a+b+c+d+e+f)

1,697,250.00

Project Tags

CBIT: Yes NGI: No SGP: No Innovation: No

Project Sector (CCM Only):

Enabling Activity

Taxonomy:

Focal Areas, Climate Change, United Nations Framework Convention on Climate Change, Capacity Building Initiative for Transparency, Influencing models, Convene multi-stakeholder alliances, Strengthen institutional capacity and decision-making, Transform policy and regulatory environments, Stakeholders, Private Sector, Civil Society, Community Based Organization, Non-Governmental Organization, Academia, Type of Engagement, Information Dissemination, Gender Equality, Gender Mainstreaming, Sex-disaggregated indicators, Capacity, Knowledge and Research, 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. The explanation and justification of the project should be in section B “project description”.(max. 250 words, approximately 1/2 page)

This CBIT phase 2 project seeks to build on the achievements of the CBIT phase 1 that was finalized in 2022. As such, the overall aim is to further strengthen the national transparency system for climate change by enhancing the Transparency Platform as well as the underlying Monitoring, Reporting, and Verification System (MRV) of Panama. The CBIT project thus responds to the need of Panama, as a signatory country to the Paris Agreement, to establish functional systems enabling the reporting of climate change information under the international reporting guidelines as stipulated by the Enhanced Transparency Framework. The core elements of such reporting system are the elaboration of the GHG Inventory, effective tracking of the National Determined Contribution’s (NDC) targets for GHG emission reductions, increasing adaptative capacity to the adverse effects of climate change and the identification and tracking of finance flows dedicated to climate change. The CBIT phase 2 project primarily targets these elements seeking to improve existing institutional arrangements and approaches, establish new ones where necessary, and promote capacity-building and knowledge generation.

With finalization of the CBIT phase 1 project, Panama counts with overall institutional arrangements and a conceptual and technically well-designed IT platform for centralizing climate change data flows. However, there are relevant gaps within the current system which will be addressed by the CBIT 2 project. These shortcomings resolve largely around the need to further integrate the individual components of the MRV. Specifically, the current gaps include the lack of certain institutional arrangements within the industry, waste and forestry sectors impeding the accurate and timely collection of required data. Moreover, the national system for monitoring climate change adaptation efforts requires fine tuning and the climate finance structures have gaps regarding international climate finance and stakeholder capacity. Additional improvements are required regarding the monitoring of climate finance and the outreach and engagement strategies for the national MRV platform. Overall, and across all core elements, the CBIT 2 project sets a strong focus on providing capacity-building to stakeholders to operationalize the MRV system.

A crucial part of this is the National Transparency Platform of Panama (PNTC), which centralizes the data flows of the MRV system and provides great potential for awareness and outreach for climate change. The PNTC, however, requires further technical improvements as well as calibration of the MRV components, developed as a modular structure, to support the MRV system.

As a result of these improvements, Panama will be able to deploy a well-functioning climate change reporting and information system allowing it to duly report under the international reporting requirements and to advance the dissemination of climate change knowledge in the country.

The project will contribute to Global Environmental Benefits by enhancing Panama’s capacity to effectively implement the Paris Agreement, and potentially contribute to increased NDC ambition. It is estimated that the project will have 500 direct beneficiaries benefiting from capacity building activities, including staff of Panamanian ministries, national and subnational decision-makers, the private sector, civil society organizations (CSOs) and other relevant stakeholders, of which 50% are expected to be women. The access to more reliable data and improved reporting will also improve the information provided to the global Stock take, enhancing the overall capacity to track the actual progress towards the long-term temperature goals of the Paris Agreement. The project will additionally enhance Panama’s capacity to report to other non-UNFCCC multilateral environmental agreements, such as the SDGs and the MEAs, strengthening a streamlined approach across international reporting commitments of the country.

Project Description Overview

Project Objective

Strengthen the National Framework for Climate Transparency of Panama

Project Components

Component 1. Integrated national climate monitoring, reporting, and verification system

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing (\$)	Co-financing (\$)
649,350.00	173,000.00

Outcome:

1. The Government of Panama tracks, measures, and transparently reports climate data through a national transparency system aligned with the UNFCCC Enhanced Transparency Framework (ETF)

Output:

- 1.1. An enhanced PNTC, being more user-friendly, secure, gender and culturally sensitive, and broad reaching is accessible to stakeholders.
- 1.2. Institutional arrangements for entities to provide data for and use data of the National Climate Transparency platform (PNTC) are strengthened.
- 1.3. A national capacity building programme for using the PNTC is designed and made accessible to national stakeholders through the PNTC knowledge hub.
- 1.4 A gender- and culturally sensitive stakeholder engagement and communication strategy for the PNTC is designed and implemented with key stakeholders

Component 2. Enhanced transparency framework modules

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing (\$)	Co-financing (\$)
481,250.00	147,500.00

Outcome:

2. The Government of Panama produces more accurate and complete data for all ETF components

Output:

- 2.1. Gender-responsive tools and templates are available to national stakeholders and their capacity is enhanced for using the PNTC GHG inventory module (SSINGEI)
- 2.2 Gender-responsive tools and templates are available to national stakeholders and their capacity is enhanced for using the PNTC adaptation module.
- 2.3 Gender-sensitive responsive tools and templates are available to national stakeholders and their capacity is enhanced for tracking the NDC and mitigation footprint and for using the using the mitigation actions registry (RENA-M) for mitigation and adaptation.
- 2.4 Gender-sensitive responsive tools and templates are available to national stakeholders and their capacity is enhanced to use the climate finance module (RenMI) for tracking climate finance.

Component 3. Streamlining climate change into national policymaking

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing (\$)	Co-financing (\$)
160,400.00	42,500.00

Outcome:

3. The Government of Panama streamlines climate change into national policy development

Output:

- 3.1. Tools are available to national stakeholders and their capacity is enhanced for developing climate change policies through the PNTC.
- 3.2 The use of the PNTC is integrated into decision making processes and the capacity of national decisionmakers is enhanced for integrating climate change data into public planning

M&E

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing (\$)	Co-financing (\$)
74,000.00	21,000.00

Outcome:

4. Project is effectively monitored and evaluated

Output:

4.1. Monitoring and evaluation products are delivered (see section 9).

Component Balances

Project Components	GEF Project Financing (\$)	Co-financing (\$)
Component 1. Integrated national climate monitoring, reporting, and verification system	649,350.00	173,000.00
Component 2. Enhanced transparency framework modules	481,250.00	147,500.00
Component 3. Streamlining climate change into national policymaking	160,400.00	42,500.00
M&E	74,000.00	21,000.00
Subtotal	1,365,000.00	384,000.00
Project Management Cost	135,000.00	37,360.00
Total Project Cost (\$)	1,500,000.00	421,360.00

Please provide justification

PROJECT OUTLINE

A. PROJECT RATIONALE

Briefly 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

A1. Global environmental problem

As part of the UNFCCC, the Paris Agreement was adopted in 2015 to strengthen the global response to climate change. Article 13 of the Paris Agreement established the Enhanced Transparency Framework (ETF), which aims to increase the ambition and reporting requirements for all signatory Parties to the Agreement. At the 24th

Conference of Parties held in Katowice in 2018, countries agreed on modalities, procedures, and guidelines (MPGs) for the ETF, which will come into effect in 2024.

Under the Paris Agreement and the MPGs, all Parties are required to prepare and submit biennial transparency reports (BTR), which should include an updated national inventory of greenhouse gas (GHG) emissions by sources and removals by sinks, information on progress towards achieving their nationally determined contribution (NDC), and information on support needed and received for climate actions. Additionally, under Article 7 of the Paris Agreement, each Party should, as appropriate, submit and periodically update an adaptation communication as a component of or in conjunction with other communications or documents. Biennial transparency reports are to be reported every two years, while NDC shall be revised every 5 years enhancing the ambition of the previously submitted NDC. Furthermore, Parties of the Paris Agreement shall report National Communications every four years, and all Parties are encouraged to submit low carbon long term strategies to set the national vision for achieving the objectives of the agreement. These information requirements present a challenge to all countries, especially to those that, due to their geographic and or economic reality, already face the strongest impacts of climate change.

As a signatory to the Paris Agreement, Panama has made significant progress in enhancing its national capacity to meet the requirements of the Agreement through the implementation of the GEF CBIT 1 project, titled “*Development of the National Framework for Climate Transparency of Panama*.” This has resulted in improved climate change response and reporting capacity in recent years. As a core part of this effort, Panama has established an institutional structure for a monitoring, reporting, and verification (MRV) framework, which includes four systems that have been integrated into a central online platform known as the National Platform for Climate Transparency (PNTC). These systems are as follows:

- (i) A GHG inventory management system for monitoring, reporting, and verifying greenhouse gas emissions;
- (ii) An MRV system for tracking mitigation actions and maintaining an emissions registry;
- (iii) An MRV system for means of implementation; and
- (iv) A monitoring and evaluation (M&E) system for adaptation.

While progress levels vary across these systems, their integration into the PNTC has greatly improved Panama’s climate change transparency capabilities. The CBIT 1 successfully built technical capacity and know-how to generate, manage and disseminate robust and verifiable climate-related data, mainly within the Ministry of Environment (MiAmbiente). However, technical capacity and know-how remains relatively weak in and beyond this institution.

Hence, despite evident progress, the country still faces difficulties in effectively complying with the stipulations of the Paris Agreement and ETF due to the absence of a fully implemented and enabled MRV system. Remaining key challenges include capacities to generate, manage and disseminate robust and verifiable climate-related data. Another challenge is a weak technical capacity and structural gaps in the collection of emission data resulting in limited robustness of the GHG inventory management system. Furthermore, effective implementation of developed data collection protocols and guides is hampered by limited coordination and capacities of data providers. Regarding adaptation, a monitoring and evaluation (M&E) system to measure adaptation actions, vulnerability and progress is not fully implemented yet. As a result, adaptation measures cannot be adequately designed, implemented, and tracked in the country. Lastly, while climate change is clearly gaining ground in the public policy discourse, mainstreaming of climate change considerations in wider development policy as well as buy-in from private and public stakeholders still lags.

The objective of this CBIT 2 project is therefore to establish functional and inter-connected institutional systems and a transparent information sharing infrastructure enabling the analysis and reporting of climate change information in the country. The elements for reporting are defined by the international reporting obligations of

the Paris Agreement and require Panama to elaborate the GHG Inventory, to effectively track the National Determined Contribution's (NDC) targets for GHG emission reductions, increase the adaptive capacity to the adverse effects of climate change and the identification and track finance flows dedicated to climate change. In this CBIT 2 project, the primary goals to achieve the objective are to activate the key driving aspects of national MRV systems, which are improved and effective institutional arrangements and methodologies, the establishment of new ones where necessary, and the promotion of capacity-building and knowledge generation. The main channel through which these improvements will be implemented is through an extended and fine-tuned National Climate Transparency Platform (PNTC) to effectively bundle all key aspects of the national MRV system.

A2. Baseline – Panama's current and future existing efforts

1) National transparency framework

i. Governmental framework for climate action

Panama acknowledges the urgency to act in the fight against climate and has ratified a range of international agreements and treaties as well as increasingly invoked national climate change legislation and policy since ratification of the UNFCCC in 1995.

In 1998, Panama ratified the Kyoto Protocol and in the same year put into effect the General Environment Law laying the foundation for compliance with the international climate change agreements. Since then, various national policies were drafted including the national Climate Change Program in 2001, the National Climate Change Policy in 2007 and a Climate Change Program targeting mitigation and adaptation actions dating to 2009.

Regarding Panama's participation in international climate change agreements, in 2015, the Doha Amendment updating the Kyoto Protocol was ratified as well as the Sustainable Development Goals. These were followed by the Paris Agreement in 2016, which accelerated additional national policy responses.

Policies and legislation since ratification of the Paris Agreement climate change include the first submission of the Nationally Determined Contribution (NDC) in 2016, which was updated and aligned with other climate change policies in 2020. In the NDC, Panama commits an absolute emission reduction by 2030 through 29 targeted mitigation actions and further pledges to enhance its resilience to climate change impacts via adaptation measures. The current policy framework in effect in Panama includes the following national strategies and legal acts including overall development and climate change strategies as well as sectoral programs.

- Framework Law for Climate Change – currently in the adoption process
- Green Taxonomy – currently under development
- Strategic Government Plan for Panama 2019-2024 (2019)
- National Climate Change Strategy 2020 – 2050 (2019)
- Updated Nationally Determined Contribution (2020)
- National Program Reduce Your Footprint (2020)

- National Environment Strategy (2022)
- National Energy Plan 2015-2050 (2015)
- National Climate Change Plan for the Agriculture Sector (2018)
- National Policy for Disaster Risk Management (2020)
- National Strategy for Reducing Emissions from Deforestation and Degradation of Forests (2022)
- National Forest Restoration Program (2022)
- National Gender and Climate Change Plan (2022)
- National Electric Mobility Strategy (2019)

ii. Institutional arrangements, key actors and national platform

Established in 2015, the Ministry of Environment (MiAmbiente) is the key responsible stakeholder for environmental protection and sustainability and ensures the implementation of the National Environment Policy. The Ministry is supported by a Technical Climate Change Council which is an inter-institutional government body consisting of representatives of key ministries leading the national climate change agenda such as the Ministry of Economy and Finance, the Ministry of Foreign Affairs, the MIDA, the Ministry of Public Works (MOP), Ministry of Health (MINSA), the Ministry of Housing and Territorial Planning (MIVIOT) as well as representation from the Ministry of the President and the Government. Furthermore, actors from civil society, and academia as well as private enterprises may be invited to the council.

The Inter-institutional Climate Change Committee for the Agriculture Sector (CICCSA) was founded in 2019 to support the Ministry of Agriculture Development and in the same year the Inter-institutional Committee on Electric Mobility was established seeking to further support the mitigation targets lined out by the NDC. Further information on key project actors is provided in annex K, detailing the role of relevant institutions in the CBIT 2 project.

The institutional arrangements for the national climate change MRV were strengthened by the capacity-building project of the CBIT 1, funded by the Global Environment Facility (GEF), implemented by UNEP and executed by the national organization Wetlands International. It was finalized in 2022. With the CBIT 1, Panama advanced on the key target for the national MRV, seeking to establish that “Public and private entities are able to monitor, report and disseminate robust, transparent and verifiable climate-related data from their respective sectors”. This target consisted of various components and objectives aimed at developing comprehensive institutional arrangements for the national MRV including the legal support framework and national tools to ensure technical consistency and standardization for the monitoring and reporting of climate data.

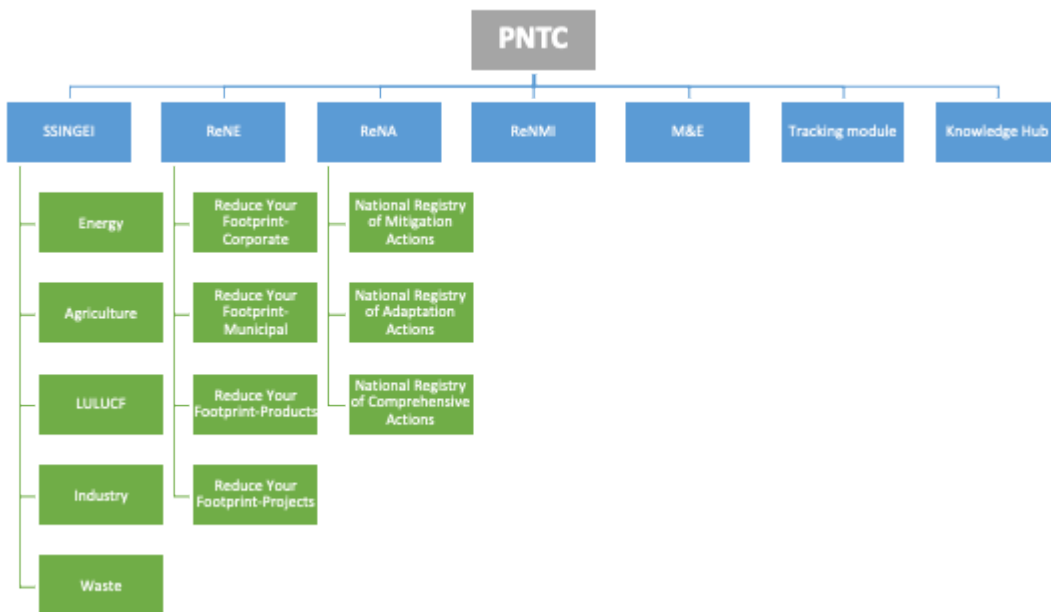
Moreover, guides and protocols for operationalizing the MRV system were developed, and a public engagement mechanism was designed and implemented. The Ministry of Environment was nominated as the key coordinating entity and data provision agreements were made with sectoral leads and data providers to ensure effective data flows. For the energy sector, the National Energy Secretariat (SNE) was installed as the responsible sectoral ministry, while the Ministry of Agricultural Development (MIDA) is the designated lead for agriculture data compilation. For forestry and land-use data the Ministry of Environment is nominated, while for Industrial Processes and Product Use (IPPU) and waste no arrangements are in place yet. Regarding the reporting of climate change information under the international reporting obligations, the Climate Change Department of the Ministry of Environment was established as the key actor.

National Platform and modules

A core part of the CBIT 1 project was the creation of the PNTC which was officially presented by the Ministry of Environment in 2022 as the national platform hosting the climate change framework. The development of the PNTC thus forms part of the key objectives of the National Climate Action Plan of 2022 as it establishes a go-to platform for the climate change transparency spectrum in the country. Furthermore, the PNTC is a main element of the overarching National Framework Law for Climate Change currently in the adoption phase.

The institutional arrangements established to enable the PNTC will, going forward, be formalized by ministerial resolutions and agreements between stakeholders in Panama. These resolutions were drafted during CBIT 1 execution and were internally revised. According to Panama’s currently legal procedures, draft resolutions should now be presented to public consultation, to be approved. As of 2023, the platform is already partially operational. The PNTC features a modular structure consisting of seven modules covering the GHG inventory, mitigation and adaptation actions, support received, and monitoring and evaluation, as well as a tracking component and a knowledge hub for capacitation. While all these seven modules are conceptually developed, only four modules, the National Greenhouse Gas Emissions Registry (SSINGEI), the M&E (Monitoring and Evaluation for Adaptation), the RENA (National Actions Registry) and the ReNMI (National Registry for Means of Implementation) were rolled out under the CBIT 1. Below, a visual overview of the PNTC is included, showing the modular setup of the platform. More detailed descriptions on each module and their status of operationalization as well as the theory of change for each module is described in the following sections.

Figure 1. The PNTC modules.



LEGEND:

SSINGEI: National GHG Inventory Module

ReNE: National Emissions Registry

ReNA: National Actions Registry including the RENA-M for mitigation actions and the RENA-A for adaptation actions.

ReNMI: National Registry for Means of Implementation – Climate Finance

M&E: Monitoring and Evaluation Module for Adaptation

Tracking Module: Module for Tracking progress on the Nationally Determined Contribution

Knowledge Hub: Central Knowledge Repository on the PNTC

iii. National reporting to the United Nations Framework Convention on Climate Change

To strengthen international mitigation efforts and enhance transparency in the fight against climate change, the UNFCCC requires its signatory countries to submit reports of their GHG emissions per sector as well as report on the progress of actions implemented to reduce them. In view of these international reporting requirements, Panama has submitted a number of communications to the UNFCCC since ratification.

In 2001, the first National Communication (NC1) was submitted. The NC1 reported on the national GHG emissions levels of 1994, as the common first baseline year 1990 used by many countries was discarded due to political instabilities in Panama at the time. The NC2, prepared ten years later in 2011, reported on the baseline year 2000 and contained a first outline of mitigation strategies and an analysis on capacity and technical needs of the country.

The third NC, submitted in 2018, includes two inventories for the baseline years 2005 and 2010 and the BUR1 dating to 2019 of Panama includes one inventory for 2013. Moreover, an overview of sectoral mitigation strategies was provided and a preliminary institutional framework including arrangements and climate change policies and legislation was developed. In the NC3 and BUR1, the general structure of institutional arrangements for baseline inventory development is included. However, these reports did not yet describe the specific roles and responsibilities of the entities involved and did not formalize the data flow arrangements between these entities.

In 2021, the second BUR (BUR2) was submitted containing the up to date most complete account of sectoral emissions with emission data from 1994 to 2017 as the reported time series. The BUR2 provides a detailed description of the institutional arrangements for the reporting of the inventory and for the mitigation actions, defining roles and data flows. More precisely, roles for data providers and data sources are identified and the central oversight role of the Climate Change Department of the Ministry of Environment as the data collection entity and of the CONACCP (discontinued committee) as the verification body are determined. For the inventory preparation and reporting an overview of the data flows and arrangements, including a step-by-step guide, are developed.

All reports were developed by the National Government through the Ministry of Environment, the CONACCP, and with support of the GEF, the United Nations Development Programme (UNDP) or other consultancy services. In this context, while Panama gradually increased the quality and scope of the submissions, all reports, except for the NC1, were developed by external consultancies, reflecting the low level of technical expertise in inventory development and institutional arrangements for collection, estimation and tracking as well as reporting of the required data. As a result of such outsourcing, local skill and knowledge retention regarding

capacities of government personnel responsible for the generation and management of climate-related data, has remained limited. Capacity-building will therefore play an important role for effective implementation of the MRV framework.

Panama is currently preparing its first Biennial Transparency Report (BTR), with the support of project GEF 10953 and UNDP. This project aims to support Panama in strengthening institutional capacities to develop the first BTR fulfilling the requirements as per the Enhanced Transparency Framework, which need be implemented before December 2024. The first BTR, it is planned to deliver it in June/July 2024. Currently the inventory is 95% complete, and the report is being drafted, which will be presented as an annex to the BTR. The CRC progress report is 90% complete in drafting the report. The country will report the adaptation section (despite being voluntary) as well as the report on support received/needed. With the support of Euroclima+, the CDN monitoring submodule, was developed which shows the progress information in the CDN that will be in the BTR. Pending, as part of the project proposal, is the development of the Long-Term Strategy monitoring submodule (this strategy is currently under development) and its link with the CDN and the updating of the CDN. The PNTC serves as data management instrument for the ETF. The institutional mechanisms and procedures for the BTR preparation are to be directly strengthened by the CBIT 2, complementing the preparation of the first BTR and also allowing Panama to sustainably prepare future BTRs

A summary of reporting to the UNFCCC is presented in the following table. Note, completed national communications (NCs) and biennial update reports (BURs) were funded by the GEF.

TABLE 1. OFFICIAL REPORTING TO THE UNFCCC.

Year	Report	Comments
2001	First National Communication (NC1)	Inventory for 1994 emissions.
2011	Second National Communication (NC2)	Inventory for 2000 emissions, also reference made to a mitigation strategy including short term actions and sector prioritization as well as identification of gaps related financial, technical, and capacity needs. Preliminary identification of institutional arrangements.
2016	Nationally Determined Contribution (NDC)	Information on mitigation actions per sector and sectoral projections based on emissions from 2000.
2018	Third National Communication (NC3)	Inventories for 2005 and 2010 emissions. Mitigation strategies further elaborated per sector and an outline and need for development of a LT-LEDS is provided. National circumstances and adaptation key sectors are detailed including an impact analysis of climate change.
2019	First Biennial Update Report (BUR1)	Inventory for 2013 emissions. More detailed elaboration of institutional framework including arrangements and climate change policies and legislation. Overview of support received and needed linked to specific mitigation and or mitigation actions is provided.
2020	Updated Nationally Determined Contribution (Updated NDC)	Overview of national circumstances and detailed mitigation targets and actions per sector informed by the emission trends between 1994-2017.
2021	Second Biennial Update Report (BUR2)	Inventories for 1994-2017, labelled as national inventory report, providing extensive information on sectoral emissions and detailed institutional arrangements for inventory development.

2023	Fourth National Communication (NC4)	Inventories for 2000-2019, as well as detailed description of methodological improvements and improvement plans. Furthermore, description of national policy approaches, mitigation and adaptation including loss and damage.
2023-24	First Transparency Report (BTR1)	Preparation of the first BTR to be submitted by all signatory countries to the Paris Agreement in 2024. The BTR format requires slightly amended methodological approaches and streamlines the information to be reported.

2) Progress on the four key areas of the enhanced transparency framework

i. Reporting of greenhouse gas emissions

In the preparation of the BUR2, the NDC updating process and with the CBIT 1, Panama has made significant progress on the key areas of reporting under the ETF. For the GHG Inventory, the milestones displayed in table 2 show the progress and frequency of developing reports with more recent GHG emissions data.

TABLE 2. GREENHOUSE GAS INVENTORY MILESTONES.

Year	Instance	Published data
2001	NC1	Inventory for 1994
2011	NC2	Inventory for 2000
2016	NDC	Inventory for 2000
2018	NC3	Inventories for 2005, 2010
2019	BUR1	Inventory for 2013
2020	Updated NDC	Inventories for 1994-2017
2021	BUR2	Inventories for 1994-2017

In response to the lack of a national MRV system and formalized institutional arrangements for the GHG inventory, in 2020 Panama established per executive Decree n°100 the Sustainable GHG Inventory System (SSINGEI). The recent development of partial institutional arrangements further served as the basis to collect and estimate national GHG inventory for the 1994-2017 period which was reported in the BUR2 in 2021. The Ministry of Environment is the designated key stakeholder and other sectoral leads are identified.

With the CBIT 1 project, the development of the PNTC was fostered and the MRV for the GHG Inventory was included in the SSINGEI module which aims to track what, who and when the data was provided, and who and when reviewed and approved. The SSINGEI module is supported by the National Emissions Registry module allowing for individual calculation and monitoring of the carbon footprint. Moreover, a visual elaboration of the MRV for the GHG Inventory and manuals and guides have been developed for the use of the SSINGEI. These are the Guide of the Sustainable System for National GHG Inventory Module; External User Manual of the Sustainable System for National GHG Inventory Module.

While the development of the SSINGEI is relatively advanced as per the closure of the CBIT 1 project, there are certain subcategories in the AFOLU sector which were not included in the analysis for greenhouse gases in the inventory (1994, 2000, 2005, 2010, 2013, and 2017). These are the subsector emissions corresponding to

the IPCC categories for Forests, Wetlands, Settlements and Other Land which are part of the Land-use, Land-use Change and Forestry (LULUCF) category subsumed under AFOLU. In response, an implementation roadmap to ameliorate data collection and estimation in the AFOLU sector was drafted in 2022 and with implementation foreseen in 2023. Furthermore, over the course of 2023, the Ministry of Environment developed a streamlined approach to integrate the tools and methods developed under CBIT1 into the PNTC. Currently, institutional arrangements, including data protocols and guides for the IPPU and Waste sector are not yet developed, which even though both emission sources are rather contributing little to the GHG profiles in Panama, requires addressing.

Concerning capacity-building, under the CBIT 1 project a series of short courses, such as for instance from the GHG Institute were carried out to improve the capacities of the national staff as well as additional stakeholders relevant to climate change transparency involved in data compilation, and estimation. Also tailored courses have taken place to improve the capacities to verify and validate GHG data, and use of drones to improve the quality of data.

However, to overcome the turnover of high-level staff every five years it is necessary to capacitate public servants and other key actors from private sector and civil society on the national guidelines to construct GHG inventories and conduct targeted and continuous training of personnel at all levels within the Ministry of Environment and other interested parties.

ii. Reporting of adaptation impacts

In 2020, Panama submitted its first NDC, including the communication on adaptation, in which the national circumstances were presented. The communication contains relevant information related to the country's impacts, risks and vulnerabilities, as well as the institutional agreements and committees established at the national level for cooperation on climate change matters. The NDC targets are aligned with the National Climate Change Plan laying out five key areas for adaptation actions in Panama, which are food security, water security, energy security, marine life and coastal areas and safeguarding of the logistics network.

Accelerating its efforts, in 2021, through Executive Decree n°135 on Climate Change Adaptation, Panama began developing the National Data System for Adaptation to Climate Change (SNDACC) to compile information on climate change vulnerabilities. The SNDACC is foreseen to be implemented into the PNTC once it is further developed. With the finalization of the CBIT1 project in 2022, the country began detailing institutional arrangements for the M&E module on the PNTC. However, detailed roles and responsibilities and data flows for tracking the progress indicators require further refinement and key actors especially for data provision, remain to be identified. Currently, in the M&E, as integrated on the PNTC, 16 indicators are listed to track progress on adaptation policies related to losses and damages collecting information on slow onset events, extreme weather events, economic and non-economic losses and the management after extreme weather events. This system was created with the financial support of UNOPS/ICAT and is harmonized with the NDC and aims to strengthen the National Damage Assessment and System.

Additional steps to make the M&E for climate change adaptation more effective include further improvements in data collection, such as better-defined monitoring parameters and metrics. A first step in that direction has been taken by initiating the development of IT specifications to directly upload meteorological data to the PNTC. Regarding the overall PNTC architecture related to adaptation, to date, the Actions Registry module on the PNTC (RENA-A) awaits extension to include adaptation actions as currently only mitigation is covered in the registry. This submodule will then have to be linked with the M&E module that centralized the management of adaptation efforts. Moreover, while some training to policymakers was provided to strengthen the integration of adaptation considerations in decision-making, further capacity building is needed to effectively operate the M&E system.

A major national step toward enhancing the adaptation efforts was the recently approved and already started Readiness Proposal to develop a National Adaptation Plan with the support of the GCF and UNEP. This project foresees a targeted strengthening and extension of the national M&E framework to incorporate the actions of the NAP and allow for tracking these. Moreover, it seeks to link the NAP actions and reported progress on these to the PNTC.

In line with recent developments in the international climate change debate, developing a system to account for and monitor loss and damage in the country is required. To that end, it is necessary to strengthen technical capacities and develop methodologies to better quantify economic and non-economic losses related to climate change. Another important aspect, linked to water security, is the “reduce the water footprint” system, which is to be established, in turn requiring specialized capacity-building.

iii. Tracking actions to achieve the nationally determined contribution.

With the submission of the updated NDC in 2020, Panama took a decisive step toward the mitigation of GHG emissions by 2030. The key sectors identified for mitigation are the Forestry and Land-use and the Energy sector. Panama is committed to achieve a reduction of total emissions from the country’s energy sector by at least 24% by 2050 and by at least 11.5% by 2030, with respect to the trend scenario – business-as-usual (BAU) considering inaction. Regarding the LULUCF sector, Panama is committed to the forest restoration of 50,000 hectares at the national level, which will contribute to the carbon absorption of approximately 2.6 million tons of CO₂ eq by the year 2050.

For the mitigation MRV, institutional arrangements and guides are developed and the MRV is formalized in the National Actions Registry (RENA) on the PNTC. However, the mitigation submodule (RENA-M) requires further development and needs to be populated with data on the mitigation actions. Regarding the overall procedures for the mitigation MRV, links to the SSINGEI exist, but these are not sufficiently rolled out to directly link mitigation actions to emissions trajectories and projections. The same gap exists between the RENA and the ReNMI and the actions are not directly linked with funding needed and received as registered on the ReNMI.

Moreover, for the National Reduce Your Footprint Program (RTH) which allows for registration of emissions on various organizational levels, data sharing modalities between entities, especially municipalities need to be further advanced. The RTH awaits integration in the RENE module on the PNTC.

While user manuals crucially support management of data on mitigation actions, the institutional structure defining responsibilities requires further fine-tuning and the progress and impact of mitigation actions are not always measured adequately. That is because technical capacities of stakeholders remain somewhat limited despite evident advancements in the systematic development of institutional arrangements and of the technical specifications of the RENA.

Furthermore, a guide of the National Registry of Actions (RENA), and specifically for the submodule on mitigation (RENA-M) and external User Manual of the RENA and an internal User Manual (one for all the modules) for the approval processes to be carried by the personnel of the Ministry of Environment, were developed. From a technical perspective, the submodule standardizes the information on mitigation actions and includes dropdown lists, value ranges accepted, as well as provides with a review step by the Ministry of Environment, validating the data before the registration of actions is accepted. Linked to the adaptation components of the NDC, the registry for adaptation actions, RENA-A still requires to be developed, as it is currently still in a conceptual phase awaiting the development of protocols and guides as well as technical

specifications. The submodule for cross-cutting actions, hence for those activities or policies that target both mitigation and adaptation, was structurally integrated into the PNTC, but equally requires further specification and protocols.

Overall, stakeholders will need to be further capacitated on properly designing and registering mitigation actions, and on understanding the links or impact on GHG emissions. That is, the PNTC is designed in an open and accessible manner to allow for broad participation across societal sectors in the fight against climate change, hence training activities will be key to enhance the MRV system by enabling stakeholders to truly comprehend the importance of streamlining climate change in their respective sectors or procedures. Lastly, to address issues regarding the interconnectedness of the PNTC and to address management gaps from the stakeholder side, new technological avenues including better visualization functions and maps, should be explored.

iv. Tracking support needed and received.

The aim for the MRV system for support needed and received is to monitor and assess costs of implementation and related climate finance. To that end, the climate finance MRV measures funding flows entering the country from international entities and national funds dedicated to mitigation and adaptation efforts for climate change.

Herein it is distinguished between climate finance, technology transfer and capacity strengthening and for each of these main groups it can further be distinguished between international and national climate finance. Concerning the technology transfer and capacity strengthening components, the functionalities to adequately track these funding targets need to be refined further.

The national system in Panama to manage information related to climate finance was developed via an inter-institutional and cooperative process between the National Climate Change Committee of Panama (CONACCP) (discontinued committee), the Ministry of Environment, the National Energy Secretariat (SNE), the Ministry of Foreign Affairs (MIRE) and the Ministry of Economy and Finance (MEF). A key outcome of such cooperative approach was the comparison and validation of data of the different registries of the Ministry of Economy and Finance, and the Ministry of Foreign Affairs to ensure consistency and robustness.

Under the CBIT 1, Panama advanced on the development of a climate finance MRV and institutional arrangements have been developed. This process designated institutions such as the Ministry of Economy and Finance and the Ministry of Foreign Affairs in collaboration with the Ministry of Environment climate change department as key stakeholders. Further strengthening the role of the Ministry of Economy and Finance, Resolution MEF 2023-346 was approved establishing a Technical Committee on Climate Change in the Ministry of Environment that as part of its responsibilities, is charged with gathering information on climate finance in the country, and to procure climate finance and facilitate access to financial flows as well as advise on climate-related financial decision making.

The CBIT 1 project further achieved the creation of a specific module on the PNTC, the National Registry for Means of Implementation (ReNMI), to centrally track and store information on climate finance. Conceptually, the ReNMI is linked with the RENA to allow for establishing direct links with specific mitigation and adaptation actions and related climate finance needs. As such, the ReNMI has the key objectives to provide all necessary provisions for stakeholders to submit and track data on finance needed and received, and by that to allow the identification of priority areas and the diffusion of knowledge on accessing climate finance. To date, the Climate Finance MRV has not been fully integrated with the RENA.

Additional guides, and protocols for the climate finance MRV system were drafted and capacity-building workshops with public servants on tracking support received were conducted. A budget tagging methodology

was developed and aligned with the Guideline for Climate Change Taggers for Public Investment Projects. The creation of a taxonomy for the banking and private sector is well advanced. However, institutional arrangements and agreements with the private banking sector require further formalization to capture the climate related funding streams stemming from the private sector. Related to capacity enhancements, the use of new technologies could improve tracking and analytical capacity for monitoring climate finance flows.

Moreover, the idea of introducing a carbon trading scheme is taking shape in Panama, as such a market is planned to complement the Reduce your Carbon Footprint (RTH) program by providing a tool for companies to mitigate emissions in a more effective way. In such a market, the PNTC is envisioned to provide guidance by differentiating in its mitigation action registry between state-led mitigation policies and private sector projects for participation in the trading scheme. This will be critical to avoid double counting and to establish a transparent emissions accounting system.

Finally, under a GCF readiness framework project called “Aligning financial flows of the financial sector in Panama with the Paris Agreement climate change goals” approved in 2022, Panama enhanced its capacity for managing and attracting climate finance. The project is at its final stage. Key outcomes of the project are to streamline access of accredited entities to GCF funded projects and to develop strategies to increase lacking private sector investment in low emission activities. A GCF SAP Concept Note is currently being finalized, it will seek to enhance the public investment system to better account for public funding for climate change adaptation. It can be considered a cross-sectional project as it links adaptation and climate finance.

v. ETF modules and national platform

To provide a more detailed analysis of the current development level of the MRV as defined on the PNTC, in the following, the status of the four ETF modules and additional functionalities and modules is described.

TABLE 3. DESCRIPTION OF PNTC MODULES.

PNTC Module	Description	Current status
Sustainable System for National Greenhouse Gas Inventories (SSINGEI)	The module on the PNTC for the GHG Inventory is the SSINGEI which acts as a central repository for information related to the development of the inventory. The institutional arrangements developed for SSINGEI designate the following stakeholders: The Ministry of Environment as the central national entity and the Ministry of Agricultural Development, the Ministry of Health, Ministry of Trade and Industries, the National Energy Secretariat, the Customs Authority, and the National Statistical Institute as important other actors. For the development of the inventory, guides and tools are provided across the planning, elaboration and management phases.	Partially operative but needs to be strengthened. Currently it does not include IPPU and Waste sector and LULUCF sector needs to be improved
National Emissions Registry (RENE)	The RENE module is the national registry for registering emissions on various levels. To do so, it is envisioned to compile the carbon footprints for projects, municipalities as well as corporations which are registered by stakeholder signed up to the “Reduce your Footprint”	Under development. Registry for emissions at local level (municipalities), at product level and

	(RTH) system in Panama. Specific tools and guides are provided for facilitating use of the module.	project level not developed yet.
National Actions Registry (RENA)	The RENA is the national registry for climate change actions such as projects and policies that are implemented to achieve emissions reductions (mitigation) and increase resilience to climate change (adaptation). As such, the RENA was built to host to submodules, the RENA-M for mitigation actions and the RENA-A for adaptation actions. Moreover, a sub-registry for cross-cutting actions was integrated.	Partially Operative (RENA- M) but not completed. Currently the registry for adaptation actions (RENA- A) is not developed
ReNMI (National Registry for Means of Implementation)	The ReNMI is the module centralizing information on support needed and received in Panama in order to achieve its objectives in the fight against climate change. The data contained in the module is distinguished by type of support such financial support, technology transfer and capacity building support. Moreover, information of types and different types of finance is provided.	Partially operative. Monitoring of International financing needs to be improved. Local financing tracking needs to be developed.
Monitoring & Evaluation (M&E) for System for Adaptation	The Monitoring and Evaluation module acts as the anchor for the institutional setup and procedures for tracking and evaluating adaptation efforts in the country. As such, the M&E module links with the RENA-A for the individual adaptation actions and the ReNMI for the support received. The M&E for adaptation includes institutional arrangements as well as specific procedures and guides to facilitate the management of climate change adaptation.	Partially operative Needs to be strengthened, Submodule for adaptation actions needs to be developed.
National Data System for Adaptation (SNDA)	The SNDA is envisioned as the central data system for relevant climate change adaptation data related to vulnerabilities and risks in Panama. The SNDA is formalized through Executive Decree n°135 on Climate Change Adaptation and is to be integrated into the PNTC once its scope, the necessary institutional and technical specificities are further defined. In relation to the M&E module tracking adaptation efforts linked to clear indicators and objectives and the RENA-A for registering individual adaptation actions, the SNDA is planned as a key data system that incorporates an ample data base hosting analysis, scenarios and vulnerability maps for climate change in Panama.	Not developed. Currently only the main portal was initiated.
Tracking Module	The tracking module monitors the achievement of the Nationally Determined Contribution (NDC) and thus streamlines information on the national GHG inventory, mitigation, and adaptation actions as well as support received. That is, for the implementation of the NDC, countries formulate clear greenhouse gas emission reduction targets and, on a voluntary basis, goals for enhanced adaptation to climate change, which in turn require the implementation of targeted mitigation and	Under development Currently the NDC tracking is developed but the monitoring of the LTS and the integration with other modules has not been developed yet.

	<p>adaptation actions. The tracking module combines these actions hence in view of the national climate change targets. The module, still requires the integration of more detailed user guides and manuals to operate it.</p>	
<p>Knowledge Hub</p>	<p>The PNTC is conceived of as the key national repository and transparency tool for climate change activities to facilitate the national MRV system. As such, the PNTC provides a module called Knowledge Hub where stakeholders can retrieve key information and training on all modules, sectors and on wider climate change issues. This module needs to be still developed to ensure the general public and especially the young generation have tools to increase their knowledge and capacity to actively participate and get involved in the process to fight climate change. Linked to this, the indigenous communities have thus far not been sufficiently included in the engagement process for the development of specific tools to strengthen their participation and involvement, as per finalization of the CBIT 1 project due to geographical and technological constraints.</p>	<p>Under development. Currently the module is defined in the platform and it has only two accessible. New trainings, functionalities and documents of interest need to be developed.</p>

Having presented the current development status of the PNTC in more detail, the table below displays the conceptual linkages of the PNTC modules, presenting hence the target scenario for the platform which the CBIT 2 project will seek to implement.

TABLE 4. PNTC MODULES AND INFORMATION FLOWS



Source: Elaborated based on the PNTC Website (<https://transparencia-climatica.miambiente.gob.pa/>)

3) National tools for facilitating long-term low-emission and climate-resilient development planning

As noted above, Panama has actively developed and adopted a robust climate change related policy framework. Other key strategic climate change policies are still under development such as the National Strategy on Climate Change currently in review for consultation with different sectors, a draft of a Climate Transparency Chapter in the Climate Change Law proposal that has been presented to the Legislative Assembly, and a Draft of an Executive Decree on Climate Transparency that has been presented and approved by the Climate Change Directorate.

Nevertheless, even though a robust policy framework exists, and information and data are available to support the implementation of these policies and strategies, limited data sharing mandates and formal confidentiality agreements present a challenge for ensuring continuous information sharing.

For instance, several engagement activities with public, private, and civil society stakeholders have been conducted to support the development of climate change policies and strategies, and information on the outputs and agreements should be safeguarded to maintain their contribution to climate change planning activities. Currently, this information is not adequately and safely stored where it is accessible for all relevant policymakers. This creates an issue related to the integrity of national climate planning and reporting activities that currently do not take into account significant inputs from all relevant stakeholders. This is also reflected in the registering and tracking of emissions, mitigation, and adaptation actions, where an integrated platform is needed encompassing these areas to support policy and strategy development, and which can subsequently be reported to the public. The lack of tools has also become evident at the city level, where mitigation and adaptation actions are being undertaken, but there is no national registry that contains reports about the positive impacts of these strategies.

As such, there are inadequate mechanisms to efficiently involve stakeholders in climate planning and reporting. The lack of national tools can further lead to insufficient integration of concrete climate analysis and actions into decision making and planning and limited buy-in from relevant stakeholders (public and private). This can further lead to a lack of internal coordination among the different ministerial departments of Panama and their awareness of the ongoing projects/initiatives. These issues are further exacerbated by insufficient technical capacity of public institution personnel to assess climate change-related data and incorporate the information in their planning activities.

In this context, to support the national climate change related policy framework and related decision-making activities, Panama is in the process of establishing the PNTC as centrally hosting the national climate change framework. The PNTC therefore aims to increase transparency, track data, make more efficient the data gathering process, automate reporting and provide better information to the public and decision-makers. Public and Private entities will be able to report their actions related to GHG mitigation, they will also be able to access the RENA and monitor the status of actions (all actions in general and actions registered by them with more detail). It is currently online and available to the public. The platform allows Panama to make more informed decisions for climate change related planning activities as part of the reporting requirements under the Enhanced Transparency Framework (ETF) of the Paris Agreement.

In sum, the transparency platform should be used to inform decision-making processes at both the private and public level starting from high level national development plans and spilling over to more concrete (geographically and sectorial) structures. To that end, and to enhance the design of targeted climate actions, the capacity of public and private stakeholders needs to be enhanced.

4) Baseline projects

TABLE 5. TABLE OF BASELINE PROJECTS.

Project	Description	Actors,	Timeframe	Links with CBIT 2	Funding
Development of the National Framework for Climate Transparency of Panama (CBIT 1).	This project supported Panama in creating a national MRV framework for climate change transparency including the launch of the PNTC and the development of institutional arrangements, protocols, and data flows.	GEF, Ministry of Environment, UNEP as implementing agency.	2020-2022. The CBIT 1 was finalized in November 2022. (finalized)	The outcomes of the CBIT 1 constitute the main baseline framework for informing the CBIT 2 and the gap analysis provided in the Improvement Plan build the basis therein.	USD 850,000
NC3 and BUR1 under the UNFCCC.	These projects assisted Panama in the preparation of its BUR1 and NC3 for the implementation of its obligations under the United Nations Framework Convention on Climate Change.	GEF, Ministry of Environment, UNDP as implementing agency.	2015-2019. The NC3 was submitted in 2018 and the BUR1 in 2019 (finalized)	Information from these reports inform the baseline scenario of the CBIT 2 project.	USD 852,000
Panama's GCF Readiness Support Proposal.	The aim of the readiness support was to support Panama's national government in building a strong climate change policy framework to move the country toward a low-emissions economic and a climatic resilient development by enabling access to GCF funded projects for National Designated Authorities.	GCF, CAF, Ministry of Environment,	2017-2019. (finalized)	The project informs the CBIT 2 on how the Ministry of Environment is capacitated in accessing financing and implementation support for a multitude of potential climate change projects that are relevant to consider for the CBIT 2.	USD 895,667
NC4 and BUR2 under the UNFCCC.	The project objective was to assist Panama in the preparation of its Fourth National Communication and Second Biennial Update Report (BUR2) for the implementation of the obligations under the United Nations Framework Convention for Climate Change.	GEF, Ministry of Environment, UNDP as implementing agency.	2019. The BUR2 was submitted in 2021. The NC4 was submitted in August 2023. (finalized)	Information from these reports inform the baseline scenario of the CBIT 2 project.	USD 852,000
Preparation of the First Biennial	The objective is to support Panama in strengthening institutional	GEF, Wetlands International, UNDP	2022-2024 (ongoing) .	The CBIT 2 project will complement the preparation of the first	USD 484,00

Project	Description	Actors,	Timeframe	Links with CBIT 2	Funding
Transparency Report (BTR).	capacities to develop the First Biennial Transparency Report fulfilling the requirements as per the Enhanced Transparency Framework.	as implementing agency.		BTR, as it seeks to capacitate Panama in sustainably preparing future BTRs. In that context, the institutional mechanisms, and procedures for the BTR preparation are to be directly strengthened by the CBIT 2.	
Preparation of strategic frameworks and climate finance to reduce deforestation and forest degradation and guide the investment of the GCF in Panama.	This preparatory program supports the Ministry of Environment to enhance its REDD+ activities and improve access to climate finance and its capacity to Measuring, Reporting and Verifying (MRV) forestry activities.	GCF, Ministry of Environment, FAO as implementing agency.	2020-2022. (finalized)	The MRV improvements in the forestry sector directly link to the strengthening of institutional capacities for the forestry sector personnel under the CBIT 2.	USD 800,000
GCF readiness: Aligning financial flows of the financial sector in Panama with the Paris Agreement climate change goals.	The objective is for Panama to enhance its capacity for managing and attracting climate finance. Key outcomes of the project are to streamline access of accredited entities to GCF funded projects and to develop strategies to increase lacking private sector investment in low emissions activities.	GCF, UNEP as implementing agency.	2022-2024. (ongoing, final stage)	The project informs the development of the CBIT 2 on climate finance related strategies in the country, particularly on the engagement and incorporation of private sector stakeholders.	USD 796,113
Building capacities for the development of the National Adaptation Plan in the context of the NDCs adaptation themes in Panama.	Supports building sustainable country capacity and strengthen stakeholder engagement to plan, finance, implement, monitor, and report strategic adaptation processes and communicate knowledge about climate change adaptation. The capacity-building program for the National Adaptation Plan runs in parallel to the CBIT 2 and can provide information on the institutional arrangements developed for adaptation actions.	Ministry of Environment, UNEP.	2022-2025. (Ongoing (started in the last trimester of 2023))	The capacity-building program for the National Adaptation Plan runs in parallel to the CBIT 2 and can provide information on the institutional arrangements developed for adaptation actions. Moreover, as the project seeks to link the Nap action tracking to the PNTC, alignment is highly necessary.	USD 3,000,000

Project	Description	Actors,	Timeframe	Links with CBIT 2	Funding
GCF readiness: Capacity Building to prepare for the implementation of Carbon Markets and Article 6 in Latin America.	GCF Readiness, promotes the generation of knowledge from a regional perspective to provide the participating countries with the institutional, technical, and operational capacities to advance towards the full implementation of Article 6.	GCF , Under-Secretariat of International Financial Relations for Development, Secretariat of Strategic Affairs of the Presidency of the Nation, Argentina Ministry of Environment and Energy, Costa Rica Ministry of Environment and Natural Resources, Dominican Republic Minister of Environment and Natural Resources, El Salvador Minister of Environment and Natural Resources, Guatemala Secretary of Energy, Natural Resources, Environment and Mines, Honduras Ministry of Finance and Public Credit, Nicaragua Minister of Environment, Panama (Lead NDA), UNEP 30 months	Ongoing (30 months duration)	As this Readiness proposal will provide technical capacities and tools to promote a stronger engagement of national stakeholders public and private- in carbon-based mechanisms that will enable the countries to catalyze climate financing and comply with their climate objectives, it is relevant to link the capacity building approach for the climate finance component of the CBIT 2 with this program.	USD 2,250,000
NDC Partnership Action Fund (PAF) proposal package	Approved in 2023 and funded by NDC Partnership, this project is aimed at integrating the teams of the Ministry of Finance and the Ministry of Environment to improve and increase climate action efforts that will lead to greater climate ambition and transparency. The activities prioritized will generate inputs to update the information systems of the MEF and MiAmbiente and recommendations to improve policy/regulatory frameworks for the management of financial and economic	Ministry of Environment, UNEP	12 months from start. Ongoing	The CBIT 2 projects links with this PAF package because of its aim to crucially link the dedicated personnel of the Ministry of Finance and of Environment for improving the management of climate finance and associated decision-making. In other words, the CBIT 2 will seek to align the strategic direction for climate finance with the package proposals.	USD 357,000

Project	Description	Actors,	Timeframe	Links with CBIT 2	Funding
	information that guides decision-making on climate change and management of financial and economic data derived from the project portfolio				
UNDP Climate Promise	UNDP supports the development of the National Data System for Adaptation to Climate Change (SNDACC) in expanding the capacity to gather climate data from various entities. The aim is to create an accessible data point to store information that can then be used by the Climate Change Directorate	Ministry of Environment, UNDP	Phase 1: Finished Phase 2: ongoing	The CBIT 2 project seeks to establish a functioning Monitoring and Evaluation system and will drive the extension of the PNTC to better host adaptation actions. As such, the SNDACC is highly complementary as a data focal point and synergies between the CBIT 2 outputs should be fostered.	USD 684,000

In the following, the main barriers for strengthening Panama’s transparency framework to meet the demands of the enhanced transparency framework under the Paris Agreement are listed. These barriers were identified through a comprehensive baseline analysis and in discussions with key stakeholders.

5) Barriers of the national transparency system

1. Lack of a fully operational MRV system and institutional arrangements, procedures, and protocols for the continuous collection of required data

Panama has developed a national MRV framework, the PNTC, consolidating the national systems for enabling continuous reporting under the ETF. Complementary institutional and legal provisions have been implemented through the CBIT 1 project, however robust data sharing modalities ensuring timely and complete data submissions as well as technical capacities still require further development.

- Panama has established institutional arrangements for tracking and reporting of the GHG inventory as well as mitigation actions. However, current arrangements are not sufficient for the collection of data to secure the timely delivery of quality inputs for the different components of the platform and certain emissions categories could not yet be estimated and reported.
- The technical capacity to effectively collect and analyze climate change data is not sufficiently developed beyond the Ministry of Environment and the regular turnover of high-level staff complicates sustainable capacitation of servants on the national guidelines to construct GHG inventories and track and estimate mitigation actions.

- As a result, the preparation of transparent reporting under the ETF cannot be carried out fully autonomously as support from contracted external consultancies is needed. Such outsourcing further leads to limited local skill, and knowledge retention and due to such limited skill formation, the preparation of the Biennial Transparency Reports (BTRs) from 2024 onward presents a great challenge for Panama.
- Based on the above mentioned, the MRV system still requires strengthening of the current institutional arrangements between data providers and MRV management, to ensure timely data submission, development of improved linkages of the modules as well as capacity-building to close prevalent gaps in data collection, data estimation and reporting quality.
- Regarding the platform hosting the national MRV system, the PNTC, several technical aspects should be further strengthened such as are required improvements for the overall data security, refined linkages of the platform modules and stronger visualization functions.

2. Limited technical capacities and tools to design, implement and autonomously manage a complex, country wide climate transparency system.

Capacity issues and technical shortcomings need to be addressed for each of the four ETF modules:

- The development of the GHG Inventory is not thoroughly conducted as there are missing arrangements to collect and estimate industry and waste sector emissions and due to data gaps and lack of standardized processes to gather data and to carry QA/QC in the AFOLU sector. There are also insufficient data submissions for forestry emissions and missing technical capacity to collect data and estimate emissions of land-use categories. As a result, these categories could not be reported with the same detail and clarity in the last Biennial Update Report to the UNFCCC in 2021. While the MRV system for mitigation actions regarding the Energy and Agriculture and Forestry and Land-use sectors are formulated including data sharing agreements, there are no institutional arrangements for the industry (IPPU) and Waste sectors.
- The modules for adaptation actions, loss and damage as well as the corresponding M&E framework still require better inclusion in the PNTC and monitoring parameters and metrics to properly engage the M&E are missing. Furthermore, it is necessary to continue training entities responsible for managing the M&E framework and to ensure continuous supply of data through strong arrangements between stakeholders.
- The tracking of mitigation actions requires stronger linking to NDC targets. Accurate NDC tracking via the PNTC is still a challenge for Panama. Furthermore, the PNTC modules, while providing an elaborate setup of registering and showing data, require stronger interlinking as well as more detailed technical specifications and use of advanced technologies to enable an effective interplay between them and thus support better tracking of the country's NDC.
- The architecture for tracking climate finance needs to be further refined, potentially using new technologies currently not considered, to better monitor and analyze funding streams into the country.

3. Limited integration of climate change considerations into political decision making

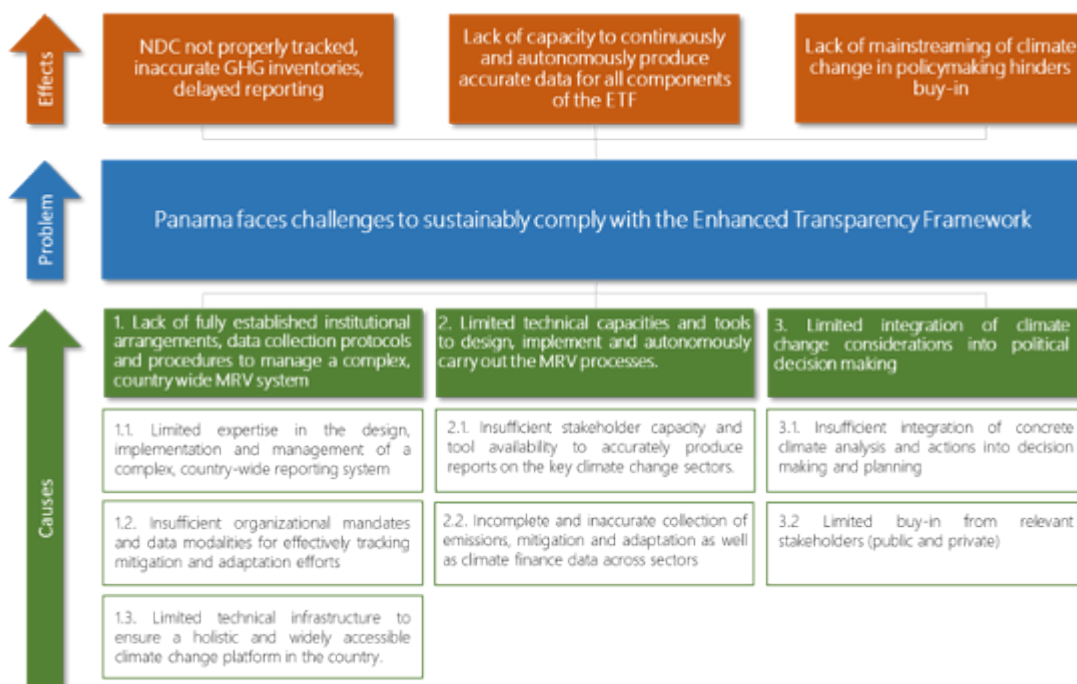
The current system in Panama consists of a robust climate change related policy framework with information available to support the implementation of these policies and strategies, but limited integration of climate change considerations into decision making processes. Adding to this, there are still inadequate mechanisms and tools to support the integration of climate change information and considerations into decision making and long-term planning activities implemented in the country. In more detail, currently there is limited capacity as well as a lack of methods and protocols for streamlining climate change information into the development of long-term plans and NDC update process. Such lack is due to missing links and clear user guides to use climate change data that can be effectively gathered through the MRV transparency processes and hosted on the PNTC. Moreover, for wider decision-making in Panama, functionalities monitoring the use of the PNTC or

other climate change data repositories are missing, making it difficult to discern to what extent decision-makers take climate change into consideration.

Panama still faces difficulties in effectively complying with the stipulations of the Paris Agreement and ETF due to the absence of a fully implemented and enabled MRV system. This challenges result from lack of fully established institutional arrangement, protocols and guidelines, limited technical capacities and tools to collect and present information, and limited integration of climate change considerations in policy development.

CBIT 2 project will establish functional and inter-connected institutional systems and a transparent information sharing infrastructure enabling the analysis and reporting of climate change information in the country. The project aims at improving institutional arrangements and methodologies, and the promotion of capacity-building and knowledge generation through an extended and enhanced National Climate Transparency Platform (PNTC) to effectively bundle all key aspects of the national MRV system.

Figure 2. Problem Tree for the National Climate Change MRV System of Panama.



B. PROJECT DESCRIPTION

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 PIF guidance document. (Approximately 3-5 pages) see guidance here

A. PROJECT DESCRIPTION

1) Overview of CBIT 2 project components

This CBIT project aims to strengthen the climate transparency system of Panama in order to meet the requirements of the ETF under the Paris Agreement. To that end, the country is expected to fortify its institutional and technical capacity to autonomously and in continuation manage its climate change data management cycle including planning, data collection, data processing and analysis, information publishing and sharing, data preservation and data reuse to produce quality reporting on climate change transparency.

Through implementing such a transparency system, Panama will be enabled to centrally place climate change in national decision-making and comply with the Paris Agreement's Article 13 for national reporting requirements such as the elaboration of Biennial Update Reports (and BTRs from 2024 onwards), National Communications, and the tracking and updating of its NDC. More specifically, it will improve the national capacities of Panama to fulfil the MPGs of the Enhanced Transparency Framework of the Paris Agreement.

This CBIT will improve gender mainstreaming activities in fundamental elements of Panama's climate change related policies and reports, such as the country's NDC, Adaptation Plan and NAMAs. The design and establishment of a functional transparency system with tools, guides, and protocols to monitor and evaluate (M&E) adaptation measures and monitor, report, and verify (MRV) mitigation actions, and support needed and received will additionally be supported.

The project will additionally ensure active engagement with national academia, research institutions, and public and private universities throughout the country to ensure the sustainability of the entire system and project outputs. The strengthened climate transparency system will improve data and knowledge management. Throughout the project, active engagement will be ensured through capacity building activities to ensure improved knowledge of relevant stakeholders and the sustainability of the project. The communication campaign will create public awareness and will establish a channel for continuous stakeholder consultation, interaction, and engagement.

Further supporting outreach and awareness, the PNTC will provide a better access to climate change information and allow monitoring for decision making. It will also allow to develop well informed viable strategies to increase resilience in marginalized communities of Panama, which are particularly prone to climate hazards. Frequently affected by floods and landslides, these events have widespread implications for the economic, social, and psychological welfare of vulnerable communities. Responding effectively and timely to these risks requires the strategic combination of updated information and decision-making, thereby creatively linking the expertise, efforts and actions of diverse stakeholders, including local government, scientists, industry experts, and the communities themselves. To achieve this, the PNTC represents an integrated tool of interconnectivity between the sectors and disciplines to manage climate change commitments and impacts.

Finally, the CBIT project will assist Panama in achieving the Sustainable Development Goals (SDG), and more specifically, SDG 13, by supporting the integration of climate change measures into national policies, strategies and planning, building knowledge and improving education, awareness-raising and human and institutional

capacity on climate change issues, and promotion of mechanisms for raising capacity for effective climate change-related planning and management in the country.

The project is organized in three components:

Component 1 focuses on improving the National MRV system by strengthening and formalizing the institutional arrangements as well as the national climate transparency platform (PNTC), thus responding to barrier 1 on the lack of a fully integrated and functional MRV system. To do so, it will establish an integrated and complete MRV system, extending the existing institutional architecture to cover all sectors to be reported under the ETF. To enhance connectedness of the system, the PNTC modules will be linked in an effective manner to improve efficiency and allow for further integration of related climate change data. Additionally, accessibility via improved visualization of data and better functionality as well as the security of the platform and contained data will be ensured. In order to enable continuous capacity-building, a knowledge module and training material is provided. Furthermore, it is important the national communication on climate change is improved which involves increasing the publicity and outreach of climate actions and climate change developments through making data more widely available and accessible.

Component 2 strengthens the four ETF transparency modules of the PNTC and improves related tools and templates as well technical capacities, which is aligned with barrier 2. Through targeted subsections, the aim is to improve reporting on the four ETF modules. In this context, the approaches for elaborating the national GHG inventory, compiling and developing mitigation and adaptation actions as well as for developing climate finance methodologies will be improved. For each of these areas targeted protocols are developed. These areas are linked to the PNTC and necessary linkages between modules will be created or strengthened. Special attention will be paid to building the capacity of stakeholders in the compilation of data in key sectors to improve the MRV system's accuracy.

Component 3 aims to enhance the conditions and strengthen specific tools for streamlining climate change considerations in decision making in Panama. A key aim of this is to enable sectoral policymakers to actively consider climate change considerations in their sectors and utilize the PNTC outputs to inform policy. A key tool to improve outreach and availability is the PNTC, which will allow stakeholders to obtain streamlined information on climate change helping to better integrate it in national decision making. Component 3 hence relates to barrier 3 and to barrier 1 on the platform development.

Each of the components of the proposed project is discussed below, including details on the expected outcomes, outputs, and deliverables.

This project will make a significant effort to learn from previous experiences, in particular Panama's first CBIT project ensuring the capitalization of lessons learned from the project's implementation process and results. Moreover, lessons from this project will be acknowledged for the three Nationally Appropriate Mitigation Actions (NAMAs) being formulated. In this sense, the institutional arrangements will guarantee that lessons learned are considered across ministries and sectors, with all relevant stakeholders providing inputs from the project.

The following will spell out the desired transformation compared to the baseline, as well as the project's theory of change, thus closing the project description with a discussion on the intended impact of the project.

2) Desired transformation and theory of change

The following table maps the barriers presented earlier in this document with the outputs that are part of the project (described in further length in the subsections below). It highlights the desired transformation that is expected to stem from the project intervention. This is the basis for the theory of change that is depicted in **Figure 3**.

TABLE 6. DESIRED TRANSFORMATION AS A RESULT OF THIS PROJECT'S IMPLEMENTATION

The current context	Desired transformation of behavior to be achieved through the project
Lack of a fully operational MRV system and institutional arrangements, procedures, and protocols for the continuous collection of required data.	The Government of Panama is able to report under the ETF in a sustainable manner, exploiting the synergies between ETF components and the climate change awareness and data accessibility for different audiences via the PNTC is substantially improved. The MRV framework is completed for all sectors and institutionally fully embedded and the modules of the PNTC are strongly linked and directly inform each other allowing for continuous and secure access to up-to-date information for various audiences.
Limited technical capacities and tools to design, implement and autonomously manage a complex, country wide climate transparency system.	The capacities of national stakeholders are enhanced enabling the country to manage a national-wide integrated MRV system. Stakeholders obtain lasting capacities to handle the MRV system allowing for reporting under the ETF in an autonomous and continuous manner and the linkages of modules and tools for the MRV platform (PNTC) are strengthened to exploit synergies between different climate change sectors and data.
Limited integration of climate change considerations into political decision making.	The Government of Panama streamlines climate change into sectoral policy development and stakeholders and project implementers are able to access information on climate change related programs. Climate change is centrally positioned across policy sectors.

The theory of change is included in figure 3 below and details the changes envisioned by the implementation of the project in a connective way. On the left-hand side, the project outputs which are based on the identified barriers are listed by components.

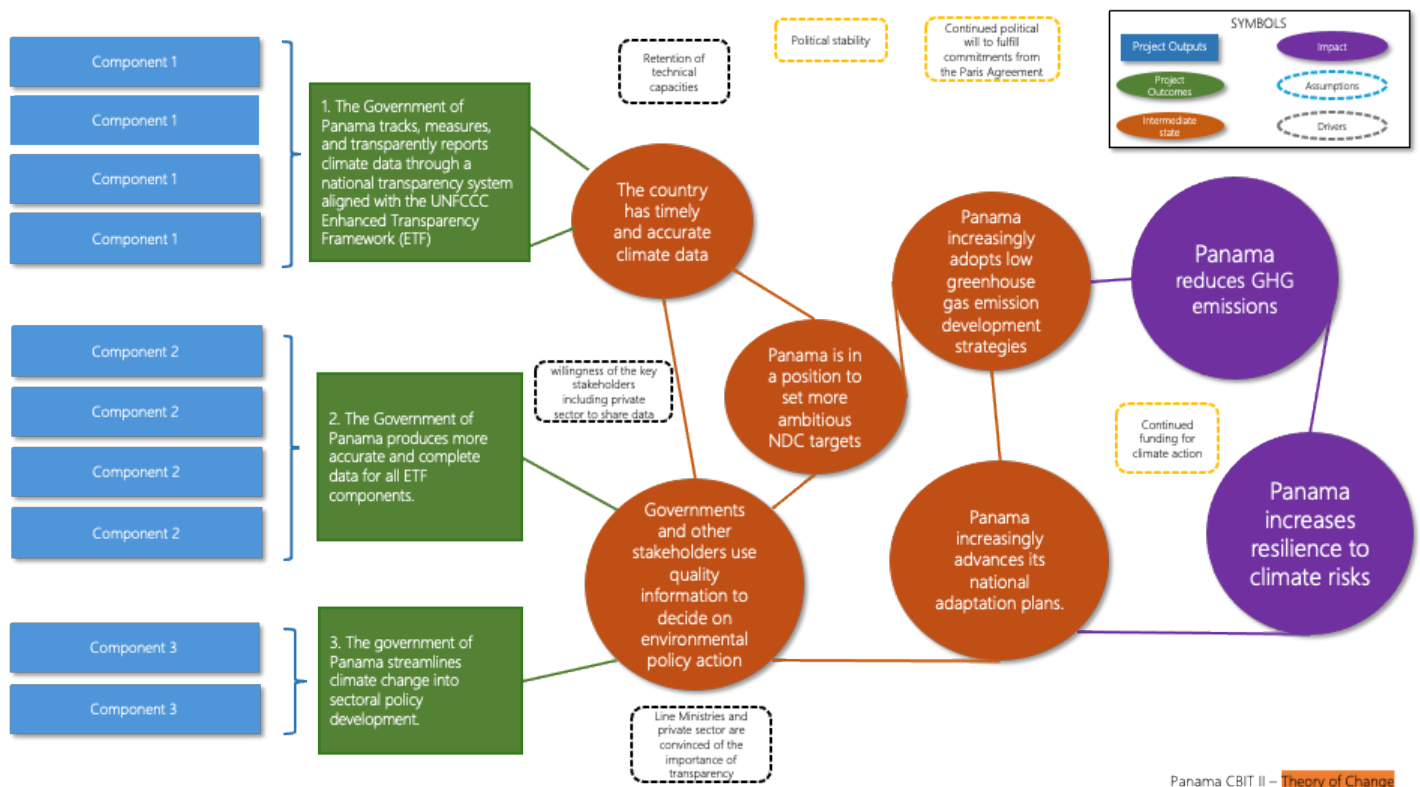
To address barrier 1 -Lack of a fully operational MRV system and institutional arrangements, procedures, and protocols for the continuous collection of required data, component 1: Integrated national climate monitoring, reporting, and verification system will englobe the following outputs: enhanced platform, strengthened institutional arrangements, capacity building program implemented and an engagement strategy.

To address barrier 2: Limited technical capacities and tools to design, implement and autonomously manage a complex, country wide climate transparency system, component 2: Enhanced transparency framework modules will englobe the development of tools and templates for each module of the platform as well as capacity building sessions.

To address barrier 3- Limited integration of climate change considerations into political decision-making, Component 3: Streamlining climate change into national policymaking will result in tools available for developing climate change policy through the platform and the use of the platform integrated in decision-making processes.

Moving to the right on the diagram, the desired outcomes of the sum of outputs are detailed and further combined to explain the associated changes in the country. The changes support that Panama has timely and accurate climate data and that policymakers and other stakeholders integrate climate change consideration in their operations. Based on such new situation, Panama will then be able to set more ambitious NDC targets which allows it to develop economically on a low emission pathway and advance on its national adaptation plans. As seen on the right-hand side of the diagram, the final desired outcomes are that Panama reduces emission and that it increases resilience to climate change risks.

For the country to move along these pathways, it will require that the technical capacities created for operating and populating the MRV system are retained in the midterm, in order to allow for consistent provision of accurate data, as well as stakeholders willingness to sharing data. Commitment with climate transparency from private and public sector needs to be secured to generate and use the information for a low-emission pathway. **To this end, institutional arrangements need to be fully formalized, through the corresponding legal channels, including procedures, forms and terms for automatic data and information transfer to the platform** The ministerial resolution and draft framework agreement elaborated through CBIT 1 are expected to be formally adopted once the legal procedure is completed (public consultation). **Legal approval of institutional arrangements strengthens the country’s ability to gather climate information in a timely and accurate manner, and therefore could affect the project outcomes, in terms of terms of GHG emission reduction and country resilience.** This theory of change relies on the assumption that present context remains unchanged, meaning that political stability is maintained, as well as the will to fulfill climate commitments, and that funding will be available to implement climate actions.



3) The proposed alternative scenario with a description of outcomes and components of the project

In order to realize the desired changes and strengthen the national transparency framework, targeted activities will have to be implemented. In this context, as the CBIT 1 project has achieved substantial improvements, the CBIT 2 will aim to extend on these. The major achievement of the CBIT 1 is the advanced development of the national climate change transparency platform (PNTC) and as such most activities envisioned in this CBIT 2 proposal respond to the remaining gaps that exist on the MRV platform.

More specifically, the CBIT 1 project conceptualized the modules of the PNTC but prioritized the development of certain modules in the first phase, the CBIT 2 hence aims to drive the extension of the PNTC developing additional modules and refining the existing ones in light of the national priorities. The table below provides a concise overview of the current status of the modules and the envisioned approaches of the CBIT 2.

Note, the outputs of the CBIT 2 below that are related to the individual modules, while representing envisioned activities, do not cover all actions to be implemented. That is because the full implementation of the national MRV transparency framework requires additional steps such as improving the overall PNTC platform stability and security, policymaking tools and conducting outreach and engagement activities. Furthermore, in order to establish a highly functional and purposeful MRV system, the envisioned outputs follow the rationale to raise and exploit synergies between the modules of the PNTC.

TABLE 7. COMPLEMENTARITIES OF THE CBIT 1 AND CBIT 2 PROJECTS

	MRV Component	Achieved outputs CBIT 1	Envisioned outputs CBIT 2
Partially Operational Modules	Sustainable System for National Greenhouse Gas Inventories (SSINGEI)	<ul style="list-style-type: none"> The module is established on the PNTC. The institutional arrangements are defined for the NDC priority sectors Energy and AFOLU sector. Manuals and guides are developed for the inventory. Targeted guides for the Energy and AFOLU sector are created 	<ul style="list-style-type: none"> Establish institutional arrangements and data sharing modalities as well as guides for the industry (IPPU) and waste sector. Strengthen the institutional arrangements in the LULUCF (forestry and land-use as part of AFOLU) sector and implement the roadmap for the sector. Develop a long-term capacity building approach covering all GHG inventory sectors
	National Actions Registry (RENA)	<ul style="list-style-type: none"> The module is established on the PNTC. User guides and manuals for use of the module are elaborated. The submodules for mitigation actions, RENAM is developed. The submodule for adaptation actions, RENAA is integrated, but not fully rolled out. A sub-registry for cross-cutting actions is 	<ul style="list-style-type: none"> Refine the RENAM to establish functionalities to link SSINGEI and RENAM Develop a geographical location tagging functionality and visualization tool for the RENAM Develop the RENAA to allow for registration of adaptation actions. Provide a capacity-building approach to train government officials to track adaptation

		integrated, but not fully rolled out	actions and register these on the RENA-A
	National Registry for Means of Implementation (ReNMI)	<ul style="list-style-type: none"> The module is established on the PNTC. Institutional arrangements are defined. User guides and manuals for use of the module are elaborated. 	<ul style="list-style-type: none"> Improvement of the institutional arrangements of the climate finance MRV in line with the finance tracking approach and methodologies Develop methodology for tracking international climate finance. Methodologies and functionalities for tracking funding of technology transfer and capacity-building support Integrate the Climate Finance MRV with RENA Conduct capacity-building to enable stakeholders to track climate finance. Create PNTC Climate Finance visualization submodule
	Monitoring & Evaluation (M&E) System for Adaptation	<ul style="list-style-type: none"> The module is established on the PNTC. User guides and manuals for use of the module are elaborated. 	<ul style="list-style-type: none"> Formalize the institutional arrangements. Develop methodology and data collection protocols to sustainably collect adaptation data.
Conceptualized Modules	National Emissions Registry (RENE)	<ul style="list-style-type: none"> The structure of the module is defined on the PNTC 	<ul style="list-style-type: none"> Migration of the Reduce Your Footprint Program (RTH), including the RTH Corporate, RTH Products, RTH Projects and RTH Municipalities to the RENE
	Tracking Module	<ul style="list-style-type: none"> The structure of the module is defined on the PNTC 	<ul style="list-style-type: none"> Design, protocols and manuals to be developed by other projects outside of the CBIT 2
	Knowledge Hub	<ul style="list-style-type: none"> The structure of the module is defined on the PNTC 	<ul style="list-style-type: none"> Design the module on the PNTC.

			<ul style="list-style-type: none"> • Develop targeted training and capacity-building material for the module. • Establish strategic partnerships with research institutions
Additional modules	National Data System for Adaptation (SNDA)	<ul style="list-style-type: none"> • The theoretical concept and envisioned function in the PNTC are developed, but the module not yet integrated in the platform 	<ul style="list-style-type: none"> • Identification and consultation of key stakeholders • Formulation of institutional arrangements • Develop guides and protocols for the SNDA. • Create visualizations and maps for climate change vulnerabilities and risks. • Develop and integrate the Reduce Your Water Footprint Program

The activities proposed above, and additional activities are further detailed in the following paragraphs, structuring the project proposal in three main components. These components in turn are organized in outputs reflecting key thematic areas, and, for each output, the individual deliverables and activities of the project are described.

The private sector will be engaged throughout all components of the CBIT 2 project. Primarily, private sector input will be required to define, improve and setup of the institutional arrangements of the MRV framework. As such, the eventual inclusion and choice of the private market actors will crucially depend on the institutional arrangements that will be developed under this project. During this process, key actors across sectors will be consulted on their potential role and contribution to various areas of the MRV framework.

Component 1: Integrated national climate monitoring, reporting, and verification system.

This component will address barrier 1: Lack of a fully operational MRV system and institutional arrangements, procedures, and protocols for the continuous collection of required data.

Outcome 1. The Government of Panama tracks, measures, and transparently reports climate data through a national transparency system aligned with the UNFCCC Enhanced Transparency Framework (ETF)

As discussed in the baseline assessment, Panama, while it has substantially advanced on the development, does not have a fully integrated and effective MRV system for the collection of data which hinders its capacity to accurately report to the UNFCCC. Outcome 1 thus focuses on closing prevalent gaps in the national MRV system to ensure Panama has adequate institutional arrangements and a properly functioning platform for centralizing data and facilitate reporting under the ETF and its reporting tools, such as the

Common Reporting Tables (CRTs) and Common Tabular Formats (CTFs). In practice this means extending the MRV to all sectors and fostering further integration of the key modules of the MRV system on the PNTC.

Regarding the extension, arrangements for the IPPU and waste sector will be established, and the gaps in the institutional setup for the forestry sector are addressed based on the existing implementation plan for forestry sector improvements. This includes the development and proposal of extensive methodology to implement the key steps for reporting these areas in the GHG inventory and for developing sectoral actions for mitigation as well as adaptation.

To enhance connectedness of the system, the PNTC will be populated with targeted guides for different user audiences. Moreover, the Knowledge Hub module will be expanded to create broad access for interactive material on climate change in the country including trainings for the public and demonstrations of impacts climate change actions. The knowledge dissemination approach is supported by the development of an overarching and gender-balanced stakeholder engagement strategy as a well as a capacity-building approach.

To ensure the platform for the MRV system, the PNTC, functions efficiently and securely technical improvements, extensions and cybersecurity safeguards are implemented. This includes improving outreach and accessibility for the public as well as improvements of IT capacities of the platform.

The enhancement of the PNTC to create a fully integrated national transparency system that will allow managing all data and knowledge developed through the project (development of protocols, guidelines and indicators for tracking GHG emissions, adaptation, NDC implementation and support needed and received). In implementing these improvements, Panama will have developed an adequate institutional architecture to collect and evaluate the required data to produce reports under the ETF.

Output 1.1 An enhanced PNTC, being more user-friendly, secure, gender and culturally sensitive, and broad reaching is accessible to stakeholders.

This output aims at further developing the PNTC to ensure its design is secure, allows for wide accessibility and supports the technical requirements of the other modules. Additionally, accessibility via improved visualization of data and better functionality as well as the security of the platform and contained data will be ensured. For the latter comprehensive safeguards are developed as improved data security further facilitates or induces willingness to share relevant climate change data. To ensure continuous and effective use of the platform, the storage capacity of the PNTC, including safeguards, is improved. Specific targets of this output further include the design and development of a roadmap for developing a platform for indigenous people, and to develop a mobile application of the PNTC to enhance its accessibility.

To enhance longevity of the PNTC, the identification and assessment on technological alternatives available for improving the PNTC and national climate transparency in the future will be fostered. This will include analyzing new technologies on the market such as block chain, artificial intelligence, and other innovative technologies available. Another crucial objective of this output is the critical review, supervision and upgrade of the PNTC to enhance gender-responsiveness. More precisely, this includes reviewing the status of the platform with respect to how the gender dimension, for example through gender-responsive progress indicators or gender differentiated analyses, is implemented. Furthermore, it will involve checking major PNTC improvements as per this CBIT 2 project against their gender-responsiveness and provide recommendations to upgrade methodology and platform module design where feasible. The National Gender and Climate Change Plan dating to 2021 will be a key guidance document to align the PNTC with the national targets.

Deliverables			
Code	Title	Indicative content	Key stakeholders

1.1.1.	PNTC mobile application	<p>This deliverable covers the development of an application for the PNTC, allowing the use offline, and allow data collection, specifically allowing fulfilling questionnaires (formularies) to be sent once signal is available, mainly for data providers not centralized in the city of Panama, in particular local communities and private sector representatives involved in mitigation/ adaptation related initiatives, with particular focus on indigenous communities</p> <p>It includes:</p> <ul style="list-style-type: none"> - A report on the specifications of the application. - The prototype (beta) of the application. - The user manual of the application. - A report on a pilot exercise developed for testing the application. - The final application. 	Ministry of Environment, Representation of Indigenous People
1.1.2.	PNTC cybersecurity and contingency plan	<ul style="list-style-type: none"> - Assessment of the security architecture of the PNTC - Revision of user guide to ensure users handle the platform with relevant security provisions. - Development of a risk analysis for the PNTC and risk mitigation strategies to ensure contingency measures can be taken in case data security or performance of the PNTC is compromised due to network failures or outside risks such as hacking attempts 	Ministry of Environment
1.1.3.	Roadmap for PNTC innovative technological improvements	<ul style="list-style-type: none"> - The analysis will include technologies such as block chain, artificial intelligence, and other technologies available to enhance the platform's technical performance. - Roadmap adopted by the Ministry of Environment. 	Ministry of Environment
1.1.4.	Enhanced PNTC storage capacity	<ul style="list-style-type: none"> - Assessment of viable technological pathways for enhancing storage capacity in line with the contingency plan and roadmap - Review the potential to migrate the platform in case of need to avoid data losses. - Upgrade the storage capacity of the PNTC, considering physical storage as well as cloud-based solutions. - Review the potential for electronic reporting to the UNFCCC (including the identification of necessary information and existing information) 	Ministry of Environment
1.1.5	PNTC gender-responsive and culturally sensitive assessment and upgrade	<ul style="list-style-type: none"> - Assessment of the gender-responsiveness and the cultural considerations of the PNTC and recommendations for improvement - Identification of improvements of the PNTC in relation to gender and culturally sensitive considerations - Implementation of improvements on the PNTC - Upgrade plan considering ongoing and future transparency improvements and supporting justification for future work such as a live problem tree and list of barriers, results frameworks and workplans that go beyond the current CBIT project. 	Ministry of Environment
1.1.6	Financing plan for long term sustainability of the PNTC	<ul style="list-style-type: none"> - Development of a financing plan for ensuring long-term sustainability of the PNTC 	Ministry of Environment

Output 1.2. Institutional arrangements for entities to provide data for and use data of the National Climate Transparency platform (PNTC) are strengthened.

The overall aim of this output is to ensure components of the MRV system, and the modules and submodules are linked, and adequate institutional arrangements and protocols are in place, **continuing the work initiated during CBIT 1.** In practice this means fostering further integration of the modules of the PNTC to allow for better interlinking of the RENA for mitigation actions with both the RENE and SSINGEI for emissions accounting. For the SSINGEI, institutional arrangements for the IPPU and waste sectors are to be determined including roles and responsibilities and data collection protocols as well as the improvement plan for data collection of the forestry sector requires implementation. Regarding adaptation, a national M&E framework is developed lining out the institutional arrangements and key methodologies to track adaptation efforts of the country. To establish and refine the institutional arrangements, extensive consultations with a wide array of stakeholders from the public, private and civil society sector will be required.

Deliverables			
Code	Title	Indicative content	Key stakeholders
1.2.1.	LULUCF sector institutional arrangements	<ul style="list-style-type: none"> - An assessment of the current situation regarding the compilation of the national GHG emission inventory for the LULUCF sector. - A mapping of stakeholders to be involved in the compilation of the national inventory. - Refinement of institutional arrangements for LULUCF sector to ensure effective and transparent data flows between key stakeholders in line with the roadmap for the LULUCF sector developed by Panama. 	Ministry of Environment, Department of Mitigation, Climate Change Directorate, Forestry Directorate
1.2.2.	IPPU sector institutional arrangements	<ul style="list-style-type: none"> - An assessment of the current situation regarding the compilation of the national GHG emission inventory and policies and measures for the IPPU sector. - A mapping of stakeholders to be involved in the compilation of the national inventory and tracking of policies and measures. - Proposal of institutional arrangements for ensuring clear roles and responsibilities and sustainable data flows for the IPPU sector. - Technical assistance for adoption of the institutional arrangements by the Ministry of Environment. 	Ministry of Environment, Department of Mitigation, Climate Change Directorate, Ministry of Commerce and Industry, Main enterprises emitting CO2 in the industrial sector
1.2.3	Waste sector institutional arrangements	<ul style="list-style-type: none"> - An assessment of the current situation regarding the compilation of the national GHG emission inventory and policies and measures for the waste sector. - A mapping of stakeholders to be involved in the compilation of the national inventory and tracking of policies and measures. - Proposal of institutional arrangements for ensuring clear roles and responsibilities and sustainable data flows for the Waste sector. 	Ministry of Environment, Department of Mitigation, Climate Change Directorate, National Waste Authority

		<ul style="list-style-type: none"> - Technical assistance for adoption of the institutional arrangements by the Ministry of Environment. 	
1.2.4.	Adaptation and loss and damage monitoring and evaluation framework institutional arrangements	<ul style="list-style-type: none"> - An assessment of the current situation regarding the compilation of climate change adaptation policies and measures. - A mapping of stakeholders to be involved in the compilation and tracking of policies and measures. - Proposal of institutional arrangements for the M&E module of PNTC. - Technical assistance for adoption of the institutional arrangements by the Ministry of Environment. 	Ministry of Environment, Ministry of Agricultural Development, Ministry of Social Development and the National Women Institute, Representation of Indigenous People, Civil Society Representatives
1.2.5	Adaptation module institutionnel arrangements (SNDA)	<ul style="list-style-type: none"> - Identification of key stakeholders - Formulation of institutional arrangements. - Technical assistance for adoption of the institutional arrangements by the Ministry of Environment. 	Ministry of Environment, Ministry of Agricultural Development, Chamber of Commerce, Industry and Agriculture, Ministry of Social Development and the National Women Institute, Representation of Indigenous People, Civil Society Representatives

Output 1.3. A national capacity building programme for using the PNTC is designed and made accessible to national stakeholders through the PNTC knowledge hub.

The aim of this output is to enable a long-term capacity-building approach that is widely accessible to various stakeholders. This will be realized through the establishment of a knowledge Hub module on the PNTC that will host a wide array of both publicly accessible and special access information on climate change related issues for various types of audiences, including specialized technical staff, the wider public and the private sector. As such, it will include online curricula covering all the areas of the ETF, thus training material will be available for information on the GHG inventory, mitigation, adaptation, NDC tracking, climate finance and policymaking approaches.

The Knowledge Hub will be subjected to technical revision and improvement to adequately host the different online curricula. In support of the Knowledge Hub, a cooperation agreement with a research university in Panama will be established to embed the trainings and knowledge creation in local academic structures. Moreover, train the trainer sessions will be carried out to support the retention of knowledge in Panama, thus enhancing sustainability of the CBIT 2 project outcomes. Lastly, in order to ensure ongoing capacitation and use of the knowledge material, a long-term capacity-building strategy will be developed covering all areas of the ETF. This strategy shall consider cooperative modalities with academia to continuously strengthen and institutionalize national capacity and further will be built around the PNTC Knowledge Hub as the central knowledge repository and platform.

Through the partnering with a local academic institution, using the training-the-trainers approach, and through having both online and onsite training sessions, the project will undertake robust actions for transferring knowledge to key climate data stakeholders in the country.

To ensure the development of a gender-responsive knowledge hub, learning materials and knowledge products will include gender considerations related to each module. In addition, training sessions for trainers will aim for gender balance, implying making efforts to provide equitable opportunities and access to male and female stakeholders (strive for at least 50% of participants are women). Finally, the long-term capacity-building strategy will provide recommendations to ensure gender perspective in long term capacity building.

Deliverables			
Code	Title	Indicative content	Key stakeholders
1.3.1	Cooperation Agreement with local university for capacity building program design and operationalization	<ul style="list-style-type: none"> - Identification of local universities with faculties and dedicated courses for agriculture and sustainable tourism for the development of a capacity building program that will be placed within the PNTC knowledge module. - MoU signed with the local university 	Ministry of Environment, Research Universities
1.3.2	Online curricula and materials and work plan for capacity-building element 1: GHG inventory (IPPU, waste, LULUCF) made available through the Knowledge Hub	<ul style="list-style-type: none"> - Update of existing learning material on the theoretical background and reporting requirements of GHG inventories and translation to Spanish to ensure accessibility of the material. 	Ministry of Environment, Forestry Directorate Ministry of Commerce and Industry, National Waste Authority
1.3.3	Online curricula, materials and workplan for capacity-building element 2: Adaptation made available through the Knowledge Hub	<ul style="list-style-type: none"> - Development of online curricula, workplan and learning materials on the theoretical background of climate change adaptation data and monitoring and evaluation aspects for adaptation. 	Ministry of Environment, Ministry of Agricultural Development, Ministry of Social Development and the National Women Institute, Representation of Indigenous People, Civil Society Representatives
1.3.4	Online curricula, materials and workplan for capacity-building element 3: NDC tracking (mitigation and adaptation) made available through the Knowledge Hub	<ul style="list-style-type: none"> - Development of online curricula, workplan and learning materials for increasing the capacity of stakeholders for tracking mitigation and adaptation actions of the NDC. 	Ministry of Environment, Department of Mitigation
1.3.5	Online curricula, materials and workplan for capacity-building element 4: Means of Implementation made available through the Knowledge Hub	<ul style="list-style-type: none"> - Development of online curricula, workplan and learning materials on the theoretical background of climate finance, international climate finance and support and the reporting requirements. 	Ministry of Environment, Ministry of Finance
1.3.6	Online curricula, materials and workplan for capacity-building element 5: Using PNTC for policymaking made available through the Knowledge Hub	<ul style="list-style-type: none"> - Development of online curricula, workplan and learning materials for the integration of PNTC outputs in policy and decision-making. 	Ministry of Environment
1.3.7	5 training sessions for trainers (one on each capacity-building element)	<ul style="list-style-type: none"> - Identify key technical personnel within lead ministries and other key institutions and designate academic personnel in the cooperating research university. - Provide capacity-building sessions targeting experienced technical staff 	Ministry of Environment

		and researchers in key institutions to create a lasting knowledge base within the institutions and in a national university.	
1.3.8	Enhanced PNTC knowledge hub incorporating, inter alia, the five capacity-building elements and hosting the Youth Academy	<ul style="list-style-type: none"> - Provision of a central training module on the PNTC knowledge hub where stakeholders can continually undertake online courses and access information on the five capacity-building elements: - Linking the Knowledge Hub module to other modules to efficiently use knowledge resources. - Establishing a communication channel between the stakeholders engaging the training on the module and the hosts of the PNTC for enabling Q&A on the capacity-building. - Enabling the management of the Youth Academy for Climate Change through the knowledge hub (this implies registry for the academy, review and approval, publishing graduates, space to share the experience by graduates, etc.). 	Ministry of Environment
1.3.9	Strategy for long-term capacity-building (10 years) for all five elements	<ul style="list-style-type: none"> - Develop a strategy to ensure continuous training of stakeholders on climate change transparency building upon the PNTC knowledge hub 	Ministry of Environment, Technical Climate Change Council

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Output 1.4. A gender- and culturally sensitive stakeholder engagement and communication strategy for the PNTC is designed and implemented with key stakeholders.

Under this output, an overarching engagement strategy is designed and implemented to establish a central national approach for climate change communication and for raising awareness for and improving the use of the PNTC. The goal hence is to roll out a broad-reaching plan aimed at engaging stakeholders from the public and private sector in a targeted and gender-balanced manner. The output hence crucially supports component 3 as the engagement of stakeholders improves climate change awareness and knowledge that is essential for incorporating climate considerations in decision making. Moreover, as this output develops the main outreach approach, it will be strongly aligned with the overall recommendations on how to better integrate gender dimensions into the PNTC as developed through the output 1.1. In this context, the gender expert will both support and critically review the development and implementation of the communication approach. This output further aims to engage the indigenous peoples in Panama through a targeted and participatory governance process both to sensitize them on the potential of the PNTC and to obtain crucial ancestral knowledge from them, particularly regarding climate change adaptation. Overall, the aim of this engagement is to design an extension module on the PNTC that covers relevant areas of the PNTC for the indigenous people. The indigenous people module is to be designed in a participative way, seeking an activating rather than only a top-down knowledge dissemination approach requiring final validation on the design by indigenous people. Supporting the subsequent implementation, a roadmap lining out pathways for developing a basic initial version during the project and later a full version of the extension module will be developed.

Deliverables			
Code	Title	Indicative content	Key stakeholders
1.4.1	PNTC stakeholder engagement strategy	<ul style="list-style-type: none"> - Design of the strategy for ensuring multi-stakeholder engagement, communication and awareness on climate change and on the PNTC as a key platform. - Recommendations for long-term engagement and stakeholder consultation - Implementation of the strategy. 	Ministry of Environment, Technical Climate Change Council
1.4.2	Two stakeholder workshops for developing 1.4.1. (Consultation/ Validation)	<ul style="list-style-type: none"> - Conduct one stakeholder consultation and one validation workshop to inform the development of the strategy. 	Ministry of Environment
1.4.3	Annual reports on strategy implementation	<ul style="list-style-type: none"> - Produce annual reports on the implementation status of the strategy (minimum 2 reports). 	Ministry of Environment
1.4.4	Governance process and PNTC extension module for Indigenous people	<ul style="list-style-type: none"> - This deliverable covers the design of an extension module for Indigenous people on the PNTC. The final design of the module will be validated by the indigenous groups. Conduct a participatory engagement process with indigenous people to ensure the extension module touches relevant areas for indigenous people and also reflects their particular knowledge. - Agreements with indigenous groups for cooperation in the design of the extension module. - A report on the stakeholder consultation approach followed to ensure involvement and engagement of indigenous people. - A report on the design of the extension module, that will be developed in close consultation with indigenous communities. - A report on the validation process followed and an assessment of the ownership of the module by the indigenous communities. - Roadmap for module implementation. - Implementation and operationalization of initial elements of the module. 	Ministry of Environment, Representation of Indigenous People

Component 2: Enhanced transparency framework modules.

This component will address barrier 2: Limited technical capacities and tools to design, implement and autonomously manage a complex, country wide climate transparency system.

Outcome 2. The Government of Panama produces more accurate and complete data for all ETF components.

As the architecture of the MRV system will be strengthened through enhancing the institutional arrangements, under component 1, component 2 seeks to define the tools and protocols to be followed by capacitated key stakeholders to sustainably, and eventually autonomously, manage the MRV system.

The outputs of component 2 are split between the key MRV components, GHG Inventory, Mitigation, Adaptation and Climate Finance, thus for each of these areas targeted solutions or outputs are developed. These outputs for each area follow a similar logic as in that they aim to strengthen the relevant modules on the PNTC

to ensure an effective data management architecture, while also seek to develop and implement data protocols and methodologies for handling the data compilation for each MRV area. These protocols will be based on the institutional arrangements as developed under output 1.2. and define clear methodological approaches and guides for the key sectoral institutions. In this pursuit, a gender-responsive focus will be fostered to ensure that data procedures allow for gender-differentiated analysis to assess for instance how adaptation actions unfold impact on different gender. The procedures are complemented by capacity building of these relevant institutions which may include government entities, private sector players and civil society actors for each of the areas, all the while setting a particular focus on the sectors where Panama requires to ramp-up its capabilities.

More precisely, stakeholders across sectors will receive capacity building in the compilation of useful and accurate data in key sectors to improve the data collection component of the MRV systems for the GHG Inventory, Mitigation, Adaptation and Climate Finance. Targeted capacity-building activities will be implemented responding to the current skill level of data providers and to the sectoral specificities. Overall, stakeholders will need to be capacitated on properly designing and registering mitigation and adaptation actions, and on understanding the links or impact on GHG emissions and resilience to climate change impacts. All capacity-building activities will aim for gender balance, implying making efforts to provide equitable opportunities and access to male and female stakeholders (strive for at least 50% of participants are women)

Furthermore, sectoral lead institutions leading the data collection process, will be trained to adequately understand data needs and assess data for subsequent estimation and reporting. Here in particular, the Ministry of Agricultural Development (MIDA), the SNE, the Ministry of Finance for public expenditure accounting and the institutions chosen for the IPPU and waste sector are targeted. As the coordinator, the Ministry of Environment and its climate change department require in-depth training to strengthen its role as the main coordinator of the MRV system and to be able to manage inquiries from other stakeholders. Other ministries and private sector actors will receive targeted training on data provision, thus will be trained to identify and streamline data pertaining to their organization depending on the required MRV component, GHG inventory, mitigation, adaptation or climate finance.

Private market actors active in the industry (IPPU) and waste sector, as well in the forestry (LULUCF) sector, will be required as data providers. The same is the case for mitigation and adaptation, because a large part of climate change actions are triggered by or channeled through the private sector. Therefore, these actors will in many cases not only have information on the implementation of such projects but also provide the finance and planning. The required private sector actors for mitigation and adaptation will likely include major players of the emission-heavy energy sector, of companies active in agriculture and forestation and industrial production, health, infrastructure, and marine activities. The private sector plays a key role for climate finance as funding as it is a key recipient for international funding and as it finances own projects that target climate change. Therefore, the sector will be actively consulted on their role and contribution within the climate finance MRV.

Concerning the technical handling, stakeholders will be capacitated on adequate and secure treatment of data to be managed on the PNTC and on the respective modules.

Output 2.1. Gender-responsive tools and templates are available to national stakeholders and their capacity is enhanced for using the PNTC GHG inventory module (SSINGEI).

To improve the national GHG Inventory, in particular the data collection and stakeholder capacity must be strengthened for the LULUCF sector and must be developed for the IPPU and waste sectors. These activities are strongly linked with the existing platform infrastructure and the data sharing modalities for the IPPU, and

waste sectors are anchored in the SSINGEI module and also in the RENE. Similarly, the protocols for the LULUCF emissions data which require a more ample and accurate data collection approach are linked to the modules on the PNTC. As the stakeholder capacity is more advanced for compiling LULUCF data, the capacity-building approach will seek to close prevalent data gaps and pave the way for implementing more ambitious methodology, while for the IPPU and waste sector capacity enhancing approach is fostered to enable primary data collection on emissions data from these sectors.

The protocols and methodologies are to be developed in a gender-responsive manner and employ, where feasible, sex-disaggregated methods to compile and analyze data to allow for a more precise estimation of potential differences in impacts on and roles of gender on emission categories. The implementation of such gender-responsive design is accompanied and supervised by a gender expert tasked with ensuring gender-responsive development and improvement of the PNTC and its elements.

Deliverables			
Code	Title	Indicative content	Key stakeholders
2.1.1	Data sharing modalities, methodology and templates for the IPPU sector for the SSINGEI and the ReNE	<ul style="list-style-type: none"> - Templates guiding the data collection process for emissions data from the IPPU sector. - Manuals and guidance on data compilation, estimation, reporting and verification for the mitigation actions in the IPPU and Waste sectors, to be incorporated into the PNTC. 	Ministry of Environment, Department of Mitigation, Climate Change Directorate, Ministry of Commerce and Industry, Main enterprises emitting CO2 in the industrial sector, related civil society organizations
2.1.2	Three (3) Capacity-building sessions on methodologies and procedures for the GHG inventory of the IPPU sector	<ul style="list-style-type: none"> - Gender-balanced capacity-building sessions conducted with stakeholders of the IPPU sector for the GHG inventory, covering main methodologies by IPCC category and QA/QC activities. - Content to be developed under output 1.3, deliverable 1.3.2. 	Ministry of Environment, Department of Mitigation, Climate Change Directorate, Ministry of Commerce and Industry, Main enterprises emitting CO2 in the industrial sector, related civil society organizations
2.1.3	Data sharing modalities and methodologies for the Waste sector for the SSINGEI and the ReNE	<ul style="list-style-type: none"> - Templates guiding the data collection process for emissions data from the waste sector. - Manuals and guidance on data compilation, estimation, reporting and verification for the mitigation actions in the Waste sector to be incorporated into the PNTC 	Ministry of Environment, Department of Mitigation, Climate Change Directorate, National Waste Authority for Urban Areas (AAUD), related civil society organizations
2.1.4	Three (3) Capacity-building sessions on methodologies and procedures for the GHG inventory of the Waste sector	<ul style="list-style-type: none"> - Gender-balanced capacity-building sessions conducted with stakeholders of the Waste sector for the GHG inventory, covering main methodologies by IPCC category and QA/QC activities. - Content to be developed under output 1.3, deliverable 1.3.2. 	Ministry of Environment, Department of Mitigation, Climate Change Directorate, National Waste Authority for Urban Areas (AAUD), related civil society organizations
2.1.5	Data sharing modalities, methodology and templates for the LULUCF sector for the SSINGEI and the ReNE	<ul style="list-style-type: none"> - Enhanced Templates guiding the data collection process for emissions data from the waste sector Manuals and guidance on data compilation, estimation, reporting and verification for the LULUCF sector emissions that are aligned with the outputs of the implementation roadmap for the LULUCF sector. 	Ministry of Environment, Department of Mitigation, Climate Change Directorate, Forestry Directorate Ministry of Agricultural Development, related civil society organizations

		- Incorporation of manuals and templates into the PNTC.	
2.1.6	Three (3) Capacity-building sessions on methodologies and procedures for the GHG inventory of the LULUCF sector	<ul style="list-style-type: none"> - Gender-balanced capacity building programme for sectoral stakeholders (definition of approach, workshop reports, and material developed) on the LULUCF sector of the GHG inventory, covering main methodologies by IPCC category and QA/QC activities. - Gender-balanced capacity building approach (definition of approach, workshop reports, and material developed) on the development of tier 2/tier 3 emission factors for the LULUCF sector. - Content to be developed under output 1.3, deliverable 1.3.2 	Ministry of Environment, Department of Mitigation, Climate Change Directorate, Forestry Directorate, Ministry of Agricultural Development. related civil society organizations

Output 2.2. Gender-responsive tools and templates are available to national stakeholders and their capacity is enhanced for using the PNTC adaptation module.

The adaptation component of the national MRV system requires a range of improvements for collecting and analyzing data on adaptation relevant elements, such as climate risks, vulnerabilities, adaptation actions. As such improved methodologies and protocols and linked to this enhanced system architecture of the PNTC is required. That is, while the institutional arrangements and the national monitoring system, the M&E framework, are developed under component 1, output 2.2 of component 2 aims to embed such framework on the PNTC and provide capacity building and methodology for enabling the framework. Next to the M&E of adaptation, the SNDA which currently is in a conceptual state needs to be developed including targeted institutional arrangements, methodologies, and protocols. Key targets of the SNDA adaptation module in the PNTC are to provide both general information adaptation issues as well as visualizations and maps of vulnerabilities and climate scenarios in the country. The M&E for adaptation and the SNDA will build the core element for adaptation on the PNTC, with the M&E primarily engaging in the close monitoring and evaluation of adaptation developments against indicators and the SNDA acting as the key data base for relevant data on adaptation.

Moreover, under the RENA, and adaptation registry is to be created to allow for registering relevant adaptation actions, this submodule will be the RENA-A which is to be strongly linked with the M&E framework so designated stakeholders responsible for managing the M&E are able to handle the RENA-A in an effective manner. Furthermore, protocols and guides for the RENA-A are to be developed. Next to the design of the modules and of the protocols for using these, stakeholders identified and integrated under the M&E will receive capacity building on working with the SNDA adaptation module and identifying, collection and estimating adaptation actions and incorporate these under the RENA-A.

As part of de the RENA, a submodule will be created: Reduce you water footprint that will include functionalities to support the management of information of organizations, municipalities and products about their water footprint (entity registration, data registration, footprint calculation, reporting and monitoring), focusing on energy and agriculture. For Panama, the efficient use of water resources is key both for the operations of the Panama Canal, which helps reduce international emissions due to maritime transport, as well

as for energy production, highly dependent on water sources, leading to significant increase in emissions during dry years.

The protocols and methodologies are to be developed in a gender-responsive manner and employ, where feasible, sex-disaggregated methods to compile and analyse adaptation relevant data to allow for a more precise estimation of climate change risks and vulnerabilities. This is highly important as the adverse effects of climate often disproportionately affect women and, conversely, because the strengthening of women’s resilient capacities to climate change carries large co-benefits across the adaptation areas health, agriculture, and infrastructure. The implementation of such gender-responsive design is accompanied and supervised by a gender expert tasked with ensuring gender-responsive development and improvement of the PNTC and its elements.

Deliverables			
Code	Title	Indicative content	Key stakeholders
2.2.1	PNTC adaptation module (SNDA) online	<p>This deliverable will develop the SNDA PNTC adaptation module, including:</p> <ul style="list-style-type: none"> - Stakeholder consultation to identify the scope of the module and its links to other PNTC components. - A section for visualizing climate scenarios for 2030, 2050 and 2070 through interactive maps and diagrams (interactive map, charts and other visualization features). - A section on sex-disaggregated vulnerability indexes, with interactive visualization features (interactive map, charts and other visualization features). - A section on risks by region with interactive visualization features (interactive map, charts and other visualization features). 	Ministry of Environment, Climate Change Directorate, local governments, private sector, related civil society organizations, academic institutions, Indigenous People Office
2.2.3	Three (3) capacity-building sessions for the PNTC adaptation modules	<ul style="list-style-type: none"> - One (1) Gender-balanced capacity building session for the M&E module (definition of approach, workshop reports, and material developed) on the compilation, monitoring, analysis and reporting of data from all relevant adaptation sectors. - One (1) Gender-balanced capacity building session for the SNDA module on the analysis and visual representation of data on adaptation risks, loss and damage and vulnerabilities. - One (1) Gender-balanced capacity building session on the use of the RENA-A submodule to input adaptation actions. - Content to be developed under output 1.3, deliverable 1.3.3. 	Ministry of Environment, Climate Change Directorate, local governments, private sector, related civil society organizations, academic institutions, Indigenous People Office
2.2.4	Reduce Your Water Footprint PNTC module	<ul style="list-style-type: none"> - Stakeholders mapping and consultation. - Development of formats, methodologies, and guidelines. - Implementation of the module in PNTC - Gender-balanced capacity building for stakeholders on the process to measure and report the water footprint, with content developed under deliverable 1.3.3. 	Ministry of Environment, Climate Change Directorate, local governments, private sector, related civil society organizations, academic institutions, Indigenous People Office

Output 2.3. Gender-responsive tools and templates are available to national stakeholders and their capacity is enhanced for tracking the NDC and mitigation footprint and for using the sing the actions registry (RENA) for mitigation and adaptation.

As the compilation and reporting of mitigation actions is a key requirement under the ETF and crucial to achieve progress on the NDC, the tools, templates, and modules of the PNTC must be strengthened. A link is to be created between the Actions registry for mitigation, the RENA-M and the SSINGEI as emissions trajectories influence the design of mitigation actions and vice versa. Hence, a functionality should be developed which allows for direct use of inventory information to analyse mitigation actions in all sectors. The key stakeholders for the key mitigation sectors should further be targeted by a gender-balanced capacity building approach similar to the one of the GHG inventory to improve NDC tracking through enhancing autonomous data collection and estimation capabilities over time. It is good practice to align these two capacity building approaches to realize synergies between the inventory elaboration and the design of mitigation actions and NDC tracking. Linked to the NDC component for adaptation, the RENA-A for adaptation actions is to be developed including the drafting of guides and protocols for its use. As the adaptations directly connect with the monitoring and evaluation of adaptation efforts as formalized on the M&E module for adaptation, a functional link between these two modules should be created to ensure adaptation actions registered are well captured by the M&E.

Next to the critical development of the capacity to track the NDC as well as the establishment of protocols, guides and functionalities for the action modules, the national Reduce Your Footprint Program (RTH) is to be integrated into the PNTC to facilitate centralization of information on the national mitigation efforts. Linked to this, a geo-tagging function is to be incorporated under the RENA-M localizing mitigation actions in the country, thereby enhancing the possibility to cross-check and validate efforts and to improve awareness and link it to the climate risk and climate scenarios maps developed under output 2.2.1.

The protocols and guides for the submodules RENA-M and RENA-A as well as the registration functions themselves should be designed in way that captures gender dimensions where possible. This means to enable the provision of details on whether and to what extent an adaptation or mitigation action impacts unfolds a differentiated impact on gender. Furthermore, regarding the development of the geo-tagging and visualization functions of the overall Actions registry, gender dimensions should be visualized and information on differentiated impact on gender be analyzed to locate particular risks and vulnerabilities in relation to climate change and gender. The implementation of the gender dimensions in these modules is accompanied and supervised by a gender expert tasked with ensuring gender-responsive development and improvement of the PNTC and its elements.

Deliverables			
Code	Title	Indicative content	Key stakeholders
2.3.1	Incorporation of Reduce Your Footprint (RTH) program for municipalities and products in the Emission Registry (ReNE) of the PNTC.	<ul style="list-style-type: none"> - This deliverable will cover the migration and expansion of the RTH program and link it to the PNTC ReNE. - A report containing an assessment and identification of the approach to be followed for the migration of information. - A report on the development of the RTH sub-programs for products, projects, and municipalities, as an 	Ministry of Environment, Climate Change Directorate, local governments, private sector, related civil society organizations, academic institutions, Indigenous People Office

		<p>extension of the previous scope (focused mainly in the private sector).</p> <ul style="list-style-type: none"> - Migration of the RTH webpage to the PNTC. - Enable data disaggregation at the municipal, project and product level. 	
2.3.2	Functionalities to link SSINGEI and RENA-M.	<ul style="list-style-type: none"> - Assessment of IT solutions to link the SSINGEI with the RENA-M to allow for synergies of data on the GHG inventory and mitigation actions. - Develop a functionality on the PNTC that utilizes data of the GHG inventory to analyze mitigation actions in all sectors. 	Ministry of Environment, Department of Mitigation, Climate Change Directorate
2.3.3	RENA adaptation actions submodule (RENA-A) online	<ul style="list-style-type: none"> - Development of a registry of adaptation projects within the RENA including guides and protocols. - Link the adaptation registry with the M&E system and its indicators. - Identify and exploit the synergies between the adaptation and mitigation registries. 	Ministry of Environment, Climate Change Directorate
2.3.4	RENA geographical location tagging functionality and visualization tool	<ul style="list-style-type: none"> - Assessment of IT solutions for developing a visualization function for geo-tagging mitigation and adaptation actions across the country on the PNTC and link it to the climate change scenarios maps. - Development of the visualization tool on the PNTC. 	Ministry of Environment, Climate Change Directorate
2.3.5	Two (2) capacity-building sessions for tracking progress on the NDC	<ul style="list-style-type: none"> - One (1) gender-balanced capacity building session on the use of data from the SSINGEI to inform progress on emission reduction targets of the NDC. - One (1) gender-balanced capacity building session on the use of data from RENA (both submodules) to inform progress on mitigation and adaptation targets of the NDC. - Content is developed under deliverable 1.3.4. 	Ministry of Environment, Climate Change Directorate, local governments, private sector, related civil society organizations, academic institutions, Indigenous People Office

Output 2.4. Gender-responsive tools and templates are available to national stakeholders and their capacity is enhanced to use the climate finance module (ReNMI) for tracking climate finance.

In order to fulfil the reporting requirements under the ETF and to implement mitigation and adaptation actions, it is important to improve the national systems for identifying and tracking climate finance flows. Hence, to lay the groundwork, the output seeks to conduct a baseline assessment to inform the development of a national climate finance MRV framework integrated into the national MRV approach that is refined by this project.

Specific further refinements to the climate finance component are to be made for tracking international finance as well as climate finance in the form technology transfer and capacity building, for which targeted

methodologies and protocols need to be developed. These protocols are linked to the ReNMI module. Another important step is the linkage of the ReNMI with the mitigation submodule of the RENA and the adaptation submodule once it is operational to directly link climate finance to climate change actions in the country. In doing so, the ReNMI will be populated with data on public or budgetary expenses on climate change actions which is currently still missing in the MRV system. These developments will be further supported by the creation of a visualization function of the ReNMI that allows for graphic depiction of climate finance flows by area, sector, gender, and other elements. In addition, to enhance the climate finance component of the national MRV, the potential technical benefits of blockchain and other adequate technologies will be thoroughly assessed to create a more effective identification and registration of funding flows.

The output further seeks to implement a gender-balanced capacity building approach which aims to enable stakeholders to sustainably track climate finance from different sources using the protocols and guides that are developed for collecting data and using the ReNMI module on the PNTC. The inclusion of gender-responsive considerations in the methodologies and functionalities on the ReNMI will be subjected to review by the Gender Expert. Regarding climate finance this will mainly include ensuring the methodologies on tracking climate finance consider gender dimensions related to recipients of funding and differentiated impacts on gender due to the funding. Moreover, the deliverable 2.4.1, setting the vision and scope for enhancing the climate finance MRV, will ensure that gender relevant aspects are monitored in the data collection process.

Deliverables			
Code	Title	Indicative content	Key stakeholders
2.4.1.	Report on baseline assessment and develop recommendations for improvement of the national Climate Finance MRV system and framework	<ul style="list-style-type: none"> - Define in a consultative process lead by the Ministry of Environment the vision and scope of the improvements for the national climate finance MRV system. - Establish definitions for the climate finance MRV system in line with the taxonomy currently being developed (As described in chapter A.2.iv of the baseline assessment - Define the objectives of the system including but not limited to: <ul style="list-style-type: none"> o Identifying Climate Finance needs (ex-ante climate finance assessment) for implementing the NDC and other climate change objectives in a systematic and periodic (e.g. annually or every 2 or 5 years) manner. o Tracking climate finance received and the national expenditure on climate finance. o Establish a system to assess data accuracy of the data gathered in the MRV with data presented by the Ministry of Finance. o Informing policy makers and the public on the efforts made and to be made for climate change action. 	Ministry of Environment, Climate Change Directorate. Ministry of Economy and Finance
2.4.2	Methodology and PNTC functionalities for tracking international climate finance received identifying climate finance needed and reporting to UNFCCC.	<ul style="list-style-type: none"> - Methodology to track international climate finance, in line with the existent taxonomy and climate budget tagging methodology. - PNTC functionalities reflecting the developed methodology for tracking international climate finance on the ReNMI including guides to 	Ministry of Environment, Climate Change Directorate.

		identify, classify and weigh climate finance. Implementation and operationalization of functionalities in the PNTC ReNMI module.	Ministry of Economy and Finance
2.4.3	Methodology and PNTC functionalities for tracking funding of technology transfer and capacity-building support received, identifying that needed and reporting to UNFCCC	<ul style="list-style-type: none"> - Development of methodology for estimating and tracking funding for technology transfers, in line with the existent taxonomy and climate budget tagging methodology. - Development of methodology for estimating and tracking funding for capacity-building, in line with the existent taxonomy and climate budget tagging methodology. - PNTC functionalities. - Implementation and operationalization of functionalities in the PNTC ReNMI module. - Technical integration of these funding templates on the PNTC under the ReNMI. 	Ministry of Environment, Climate Change Directorate. Ministry of Economy and Finance
2.4.4	Integrated functionality between the ReNMI and the RENA	<ul style="list-style-type: none"> - Integrate the ReNMI module developed for tracking climate finance with the RENA submodules to inform on support needed and received for mitigation and adaptation actions. 	Ministry of Environment, Climate Change Directorate. Ministry of Economy and Finance
2.4.5	Three (3) capacity building workshops to enable stakeholders to sustainably identify and track international climate finance and support and make use of the most appropriate technologies	<ul style="list-style-type: none"> - (1) Gender-balanced capacity-building session on tracking international climate support for key national stakeholders of the climate finance MRV - (1) Gender-balanced capacity-building session on tracking funding for support and capacity building for key national stakeholders of the climate finance MRV - (1) Assessment approach to identify and utilize the most effective technologies for identifying and tracking climate finance streams. - Content is developed under deliverable 1.3.5. 	Ministry of Environment, Climate Change Directorate. Ministry of Economy and Finance
2.4.6	PNTC national climate support visualization submodule as part of ReNMI	<ul style="list-style-type: none"> - To visualize the national expenditure in climate change activities, and the percentage of the national and sectoral budget used to fight climate change. - Development of a sub-module under the PNTC (ReNMI) to visualize the national expenditure in climate change activities, and the percentage of the national and sectoral budget used to fight climate change. - Develop a functionality to disaggregate the visualized information by mitigation and adaptation, by region, by sector, by gender if applicable and by other criteria. 	Ministry of Environment, Climate Change Directorate. Ministry of Economy and Finance

Component 3. Streamlining climate change into national policymaking

This component will address barrier 3: Limited integration of climate change considerations into political decision making.

Outcome 3. The government of Panama streamlines climate change into sectoral policy development.

This outcome aims at accelerating the use of climate change considerations in policymaking in Panama across sectors and institutions. To do so, the conditions for and the strengthening of specific tools for streamlining climate change considerations in sectoral decision making are enhanced. Important for that outcome is the improvement of the national communication on climate change which involves increasing the publicity and outreach of climate actions and climate change developments through making data more widely available and accessible. Moreover, outreach is crucially improved by the PNTC that allows a wide range of stakeholders to register emissions and see visualized and geo-tagged mitigation and adaptation actions as well as their evolution over time and in relation other aspects of climate change transparency modules. Component 3 hence relates to barrier 3 on limited integration of climate change considerations into political decision making.

The PNTC as the key national climate change platform supports the tracking and updating of the NDC or long-term emission reduction strategies (LT-LEDS) as key climate change strategies. As such, to improve the use of these linkages, stakeholders will be consulted on using relevant information for policy formulation. To facilitate this, climate change information should be closely always monitored and centrally retrievable by various stakeholders and they must be trained on effectively using the information.

By systematizing and monitoring this data in the platform and making it more widely available and accessible, the platform will facilitate the preparation of climate related reports, specifically those required by the ETF, such as national communications and BTRs, as well as improve the accuracy and quality of them. These reports are expected to inform national prioritization, climate planning and global stocktake. The Platform will then serve as a centralized system to provide information to better track emissions reduction, progress towards NDCs, climate change impacts and adaptation, levels of financial support and progress in LT-LEDs, it will foster high quality BTRs and National Communications. The information contained in these reports will reinforce the accessibility of short and long term climate information and its use for policy making economy-wide.

Both the major outputs on the climate change policies and strategies and on considering climate change and PNTC knowledge for wider policymaking are to consider gender dimensions. Regarding the policies and strategies this involves disaggregating potential impacts of emission reduction pathways on gender, which for the LT-LEDs and NDC is highly recommended.

Concerning local and national policymaking, integrating climate change considerations into these processes is to occur through a gender-responsive lens meaning the effects of climate change responsive policy should consider the differentiated impacts on gender that different policy options may entail. Targeting the streamlining of climate change considerations in policy making will provide relevant results for private market actors as they will be directly affected by policy shifts toward more climate change aware decision-making. Thus, consultations will be necessary.

Output 3.1. Tools are available to national stakeholders and their capacity is enhanced for developing climate change policies through the PNTC.

This output focuses on developing an approach for considering the PNTC information for long-term climate change decision making. The core part of this output is the assessment on integrating GHG emission scenarios

or projections into the PNTC and vice versa on how to utilize the output of the PNTC for informing long-term emission reduction strategies. The output will foster a gender-balanced stakeholder training on the LT-LEDS (implying making efforts to provide equitable opportunities and access to male and female stakeholders, strive for at least 50% of participants are women), and will establish a functionality that will allow direct formatting of information on the PNTC into required formats for informing climate change strategy development.

Deliverables			
Code	Title	Indicative content	Key stakeholders
3.1.1.	Assessment on the integration of long-term GHG emission scenarios into the PNTC	<ul style="list-style-type: none"> - Identification of methodologies, needs and challenges Panama faces in developing long-term GHG emission scenarios. - Design of mechanism for integrating methodologies into PNTC for developing long-term emission scenarios and strategies through the PNTC, including on how the tracking module can inform NDC and LT-LEDS development. - Identification of capacity building needs to produce long term GHG emission scenarios through the PNTC in a sustainable and periodic manner. 	Ministry of Environment, Ministry of Economic and Finance, Ministry of Agricultural Development, Ministry of Commerce and Industry, Ministry of Foreign Affairs, Ministry of Public Works (MOP), Ministry of Health (MINSA), the Ministry of Housing and Territorial Planning (MIVIOT) local governments, private sector, related civil society organizations, academic institutions, Indigenous People Office
3.1.2	PNTC mechanism for informing the development of long-term climate change strategies	<ul style="list-style-type: none"> - Execution and operationalization of mechanism which formats key PNTC information for supporting strategy development, including on SSINGEI emissions trajectories and RENA-M mitigation actions. - For informing, inter alia, LT-LEDS development and NDC updates. 	Ministry of Environment, Ministry of Economic and Finance, Ministry of Agricultural Development, Ministry of Commerce and Industry, Ministry of Foreign Affairs, Ministry of Public Works (MOP), Ministry of Health (MINSA), the Ministry of Housing and Territorial Planning (MIVIOT) local governments, private sector, related civil society organizations, academic institutions, Indigenous People Office
3.1.3	Capacity-building approach including two (2) sessions on the elaboration of the long-term low greenhouse gas emission development strategy (LT-LEDS)	<ul style="list-style-type: none"> - Conduct two (2) Gender-balanced capacity building sessions for key sectoral stakeholders on the foundations of LT-LEDS development and long-term vulnerability assessments using the reports elaborated by Panama. - Content is developed under deliverable 1.3.6 linked to the Knowledge Hub. 	Ministry of Environment, Ministry of Economic and Finance, Ministry of Agricultural Development, Ministry of Commerce and Industry, Ministry of Foreign Affairs, Ministry of Public Works (MOP), Ministry of Health (MINSA), the Ministry of Housing and Territorial Planning (MIVIOT) local governments, private sector, related civil society organizations, academic institutions, Indigenous People Office

Output 3.2 The use of the PNTC is integrated into decision making processes and the capacity of national decisionmakers is enhanced for integrating climate change data into public planning.

This output seeks to amplify the use of the PNTC in national policymaking processes and to enhance the capacity of stakeholders to harness the information on the platform. To enable this approach and to monitor the

use of climate change information in policy deliberation, a methodology is developed that captures the extent to which policymakers consider key climate change information as produced and shown on the PNTC. This approach is then transmitted to stakeholders through targeted and gender-balanced capacity-building. Another important part of this output is the development of a roadmap that will define goals and strategies for scaling up the PNTC and set a standard for the use of the PNTC as a key tool for decision making processes.

Deliverables			
Code	Title	Indicative content	Key stakeholders
3.2.1	Methodology and indicators tracking PNTC use for national and local policymaking	<ul style="list-style-type: none"> - Develop a methodology for tracking the use of PNTC for national, sectoral, and local policymaking. - Incorporate the methodology with indicators and visualizations into PNTC 	Ministry of Environment
3.2.2	Strategy for scaling up the use of PNTC for national and local policymaking.	<ul style="list-style-type: none"> - Conduct assessment and undertake consultations on the use of the PNTC in national and local policymaking. - Identify key national and local plans and policies that would benefit from the use of PNTC. - Develop a strategy to embed the PNTC in national and local policy-making processes. - Assessment of options to legally mandate use of the PNTC for climate change related decision-making. - Develop two draft legal texts for embedding PNTC in different national and local policy-making processes. - Hold two stakeholder consultation processes on the legal text proposals. 	Ministry of Environment, Technical Climate Change Council
3.2.3	Capacity-building approach including two (2) sessions to enable decision makers from key sectors to harness the outputs and knowledge of the PNTC	<ul style="list-style-type: none"> - Conduct two (2) gender-balanced capacity building sessions for policy planners and policy makers on using PNTC information for decision making, as part of the Capacity Building Programme (output 1.3), with content developed under deliverable 1.3.6. 	Ministry of Environment, line ministries

Component 4. Monitoring and Evaluation

Outcome 4: Project is effectively monitored and evaluated.

Output 4.1. Monitoring and evaluation products are delivered.

Progress will be reviewed yearly through the Project Implementation Report (PIR), which is the tool foreseen in the GEF’s Project and Program Cycle Policy. The purpose of the PIR is to assess project performance, to analyze whether the project is on track, what problems and challenges it encountered, and which corrective actions are required so that the project can achieve its intended outcomes by project completion in the most efficient and sustainable way. It is the responsibility of the UNEP Task Manager to monitor whether the agreed recommendations are being implemented. In between PIRs, the project team shall prepare and present intermediate internal progress reports to update project data and facilitate management. Developments in project execution will be monitored through regular follow-up meetings between the Implementation Agency and the Chief Technical Advisor.

In line with the GEF Evaluation requirements and UNEP’s Evaluation Policy, GEF Full-Sized Projects and any project with a duration of 4 years or more will be subject to an independent Mid-Term Evaluation or management-led Mid-Term Review at mid-point. This project, having a duration of 3 years, shall not have a mid-term evaluation or review, unless it is deemed necessary during its implementation according to project progress and circumstances. All GEF funded projects are subject to a performance assessment when they reach operational completion. This performance assessment will be either an independent Terminal Evaluation or a management-led Terminal Review.

In case a Review is required, the UNEP Evaluation Office will provide tools, templates, and guidelines to support the Review consultant. For all Terminal Reviews, the UNEP Evaluation Office will perform a quality assessment of the Terminal Review report and validate the Review’s performance ratings. This quality assessment will be attached as an Annex to the Terminal Review report, validated performance ratings will be captured in the main report.

However, if an independent Terminal Evaluation (TE) of the project is required, the Evaluation Office will be responsible for the entire evaluation process and will liaise with the Task Manager and the project implementing partners at key points during the evaluation. The TE will provide an independent assessment of project performance (in terms of relevance, effectiveness and efficiency), and determine the likelihood of impact and sustainability. It will have two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote learning, feedback, and knowledge sharing through results and lessons learned among UNEP staff and implementing partners. The direct costs of the evaluation (or the management-led review) will be charged against the project evaluation budget. The TE will typically be initiated after the project’s operational completion. If a follow-on phase of the project is envisaged, the timing of the evaluation will be discussed with the Evaluation Office in relation to the submission of the follow-on proposal.

The draft TE report will be sent by the Evaluation Office to project stakeholders for comment. Formal comments on the report will be shared by the Evaluation Office in an open and transparent manner. The project performance will be assessed against standard evaluation criteria using a six-point rating scheme. The final determination of project ratings will be made by the Evaluation Office when the report is finalized. The evaluation report will be publicly disclosed and will be followed by a recommendation compliance process. The evaluation recommendations will be entered into a Recommendations Implementation Plan template by the Evaluation Office. Formal submission of the completed Recommendations Implementation Plan by the Project Manager is required within one month of its delivery to the project team. The Evaluation Office will monitor compliance with this plan every six months for a total period of 12 months from the finalization of the Recommendations Implementation Plan. The compliance performance against the recommendations is then reported to senior management on a six-monthly basis and to member States in the Biennial Evaluation Synthesis Report.

A Monitoring and evaluation plan is considered in the project, and specific budget has been assigned for this purpose.

M&E Activity	Description	Responsible Parties	Timeframe	Indicative budget (USD)
Inception Workshop (IW) and Report	Report prepared immediately following the IW; it includes: <ul style="list-style-type: none"> - Review of Workplan and budget for Year 1 - Description of M&E plan - Description of Roles and responsibilities and coordination 	Execution: Chief Technical Advisor	Immediately following IW held in month 4 of project start-up	GEF:5,000

M&E Activity	Description	Responsible Parties	Timeframe	Indicative budget (USD)
	mechanisms (MiAmbiente, UNEP, others) -			
Half-yearly progress report; Quarterly financial reports;	Part of UNEP procedures for project monitoring. Quarterly financial: Detailed financial reports (in Excel), with justification of any change. Bi-annual progress: Analyses project performance over the reporting period, including gender-related results. Describes constraints experienced in the progress towards results and the reasons Describes Work Plan for the next period in an Annex and the detailed budget divided per output and inputs (budget lines)	Execution: Chief Technical Advisor	1 bi-annual report for any given year (d January 31). Quarterly financial reports Last progress & financial Reports within 60 days of project closure of operations	Part of Chief Technical Advisor tasks GEF: 9,500
Project Implementation Review (PIR)	Analyses project performance over the reporting period, including gender-related results. Describes constraints experienced in the progress towards results and the reasons Draws lessons and makes clear recommendations for future orientation in addressing the key problems in the lack of progress. The PIR is discussed at PSC meetings	Execution: Chief Technical Advisor	Yearly, by 31 July latest	
Final Report	The project team will draft and submit a Final Report, with other documents (such as the last PIR), at least two weeks before the PSC meeting for their review and comments; this meeting decides whether any action is needed to achieve the sustainability of project results; and draws lessons to be captured into other projects. Comprehensive report summarizing all activities, achievements, lessons learned, objectives met or not achieved structures and systems implemented, etc. Lays out recommendations for any further steps that may need to be taken to ensure the sustainability and replication of project activities.	Execution: Chief Technical Advisor	Final report at least two-three months of the project completion date;	
Terminal Review/Evaluation	Looks at the impacts and sustainability of the results, including the contribution to capacity development and the achievement of global environmental goals.	Execution: Independent consultants Support: UNEP and Government counterparts Commission the TE: Evaluation Office	Not before 6 months prior to and no later than 6 months after the project's operational completion	GEF: 40,000

M&E Activity	Description	Responsible Parties	Timeframe	Indicative budget (USD)
Closure Workshop (IW) and Report	Report prepared following the Closure Workshop; it includes: <ul style="list-style-type: none"> - Results achieved by the project. - Lesson learned. - Sustainability strategy and key stakeholders' engagement 	Execution: Chief Technical Advisor	Immediately following closure workshop	GEF:5,000
Inputs for M&E	IT equipment for staff, translation services	Execution: Chief Technical Advisor	During project implementation	GEF: 14,500
TOTAL indicative COST			GEF Grant for M&E: USD 74,000	

Global Environmental Benefits and Socioeconomic Benefits

The global environmental impacts generated by this project are directly related to the implementation of the ETF in Panamá. The project strengthens the country capacity to accurately report in the areas of national GHG inventories, mitigation, and vulnerability and adaptation to climate change impacts, NDC tracking, tracking support needed and received. It will also lead to a better integration of climate change into policy making, allowing for a better alignment with the UNFCCC obligations, national development needs and priorities, as well as the SDGs.

The project will contribute to enhance Panama's capacity to effectively implement the Paris Agreement, and potentially contribute to increased NDC ambition. It is estimated that the project will have 500 direct beneficiaries benefiting from capacity building activities, including staff of Panamanian ministries, national and subnational decision-makers, the private sector, civil society organizations (CSOs) and other relevant stakeholders, of which 50% are expected to be women. The access to more reliable data and improved reporting will also improve the information provided to the global Stock take, enhancing the overall capacity to track the actual progress towards the long-term temperature goals of the Paris Agreement. The project will additionally enhance Panama's capacity to report to other non-UNFCCC multilateral environmental

agreements, such as the SDGs and the MEAs, strengthening a streamlined approach across international reporting commitments of the country.

The improve National Climate Transparency Platform will ensure better access to climate change information to develop well informed viable strategies to increase resilience in marginalized communities, which are particularly prone to climate hazards. Frequently affected by floods and landslides, these events have widespread implications for the economic, social, and psychological welfare of vulnerable communities. Responding effectively and timely to these risks requires the strategic combination of updated information and decision-making, thereby creatively linking the expertise, efforts and actions of diverse stakeholders, including local government, scientists, industry experts, and the communities themselves. To achieve this, the PNTC represents an integrated tool of interconnectivity between the sectors and disciplines to manage climate change commitments and impacts.

The CBIT 2 project will assist Panama in achieving the Sustainable Development Goals (SDG), and more specifically, SDG 13, by supporting the integration of climate change measures into national policies, strategies and planning, building knowledge and improving education, awareness-raising and human and institutional capacity on climate change issues, and promotion of mechanisms for raising capacity for effective climate change-related planning and management in the country.

Innovation, sustainability and potential for scaling up.

Innovation

This project strengthens the transformation of inefficient and time-consuming data collection and reporting process into an efficient and integrated reporting process where diverse actors from nation-wide institutions are trained in the importance and practice of climate data reporting and transparency and in the use of this information for policy action. By centralizing all country's climate information in one platform and making it available to stakeholders is an innovation in itself for Panama, based on best practice approaches to transparency with effective stakeholder engagement and management, but it will also inspire further innovation among actors interested in climate change mitigation and adaptation nationwide. Indigenous people will be specifically included in the project, by developing an engagement platform based in an agreed governance process definition, which also represents an innovative characteristic for the country and the region. Accessible and reliable access to climate information combined with the capacity building opportunities provided by this project will facilitate innovations in public policy to address climate change issues among decision makers.

Sustainability

The underlying objective of this project is to develop a sustainable transparency platform, enabling Panama to continually and accurately monitoring, reporting and verifying their mitigation, adaptation, NDC and support needed and received actions. This project will build on the existing regulatory and policy framework in the country, and in the institutional arrangements, technical capacities, and transparency platform developed through CBIT 1 project.

The PNTC is hosted and managed by the Ministry of Environment, the national government agency responsible for the development and reporting of National Communications, BURs and BTRs from 2024 onward, including reporting on GHG inventories, mitigation policies and measures, adaptation and support received, ensuring the incentives for its maintenance and regular upgrade, through national budget.

Though different outputs, the project adopts an inclusive and participatory approach to promote ownership and raise awareness at all levels, contributing to streamline the enhanced transparency efforts in public and private sector. With a strong focus on long term capacity building, the project will ensure that expertise is maintained

in key stakeholders to fostering its sustainability. The increased participation and accountability of multiple stakeholders in decision-making and monitoring, coupled with a strong institutional framework and procedures, will significantly contribute to the long-term sustainability. In addition, an upgrade plan, considering ongoing and future transparency improvements, and workplan beyond the current CBIT project, will be prepared.

This CBIT project will justify the added value through enhanced institutional linkages, improved and consistent flow of high-quality data as well as feedback, use and data reporting. Furthermore, a knowledge hub will be developed in the platform, where training materials and documents will be available, and long-term capacity building strategy will be developed within the project.

Potential for scaling up.

The project has considerable potential for scaling up, given its national and cross-sectoral scope, covering sectors and actions related to emissions, mitigation, support, and adaptation. The modular design of the platform envisions the creation of interlinked modules, reflecting increasing availability of data and potential uses of climate information.

In addition, the project will promote that Panama actively exchanges lessons learned with regional peers and through south-south cooperation. The lessons learnt from the CBIT 2 project will be shared on the **CBIT Global Support Programme (CBIT-GSP)**. The project outputs and the capacity built will be used to support other countries in the region and thereby offer opportunity for scaling up and replicating activities in countries undergoing similar processes of enhancing their transparency systems and capacities.

Project cost-effectiveness

Climate change could cause significant adverse impacts on the population, ecosystems, and economic activities in Panama, deriving considerable losses. As stated in Panama's 3rd National Communication: extreme events that affect and represent a climate threat for Panama include intense summer rains, long and/or intense periods of drought and the rise of sea level. There is evidence that these threats have negative impacts on sectors of national interest with clear effects on the availability of water during the summer season, a greater demand for energy during periods of higher temperatures, loss of crops and soil, loss of coastline in the event of tidal waves, and increased flooding in large urban areas, with damage to infrastructure and services. In addition, the inequality of opportunities to face natural hazards, the poverty distribution, the need for greater monitoring of works or actions to counteract climatic effects and the challenge of greater coordination among all interested parties increase the conditions of vulnerability and are likely more recurrent for populations with scarce resources, especially for adults or children living in poverty. These factors also suggest the need for greater basic services and programs to strengthen local capacities.

Therefore, strengthening Panama's capacities to collect, manage, analyze, and make informed decisions based on the best data across all sectors, becomes increasingly important. The cost of the project, resources, and efforts would then be marginal to all the benefits across multiple sectors with multiple actors participating and advancing toward sustainable development. This is in line with the purpose of the ETF and the ultimate goals and objectives of the Paris Agreement.

CBIT 2 project will increase its ambition over CBIT 1, as it aims to consolidating the PNTC as a centralized climate change data system, including improvement of existing modules implemented through CBIT 1 as well as building new modules (including the National Data system for Adaptation, M&E, tracking Module, Knowledge hub). It also aims at strengthening national capacities with a broader scope, by implementing a

long-term capacity-building approach that will be widely accessible to various stakeholders. Finally, CBIT 2 will also strongly address the long-term sustainability of the platform.

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)

The institutional setup to execute this CBIT 2 project reflects the arrangements made under the CBIT 1. The main governance arrangements for this project include:

- As Executing Agency, the NGO Wetlands International on behalf of the Ministry of Environment. Wetlands International will hold overall responsibility for the project's execution and will maintain close interaction with the Ministry of Environment.
- An Implementing Agency (IA), mainly with a supervisory role and consolidating all reporting to the GEF. This role will be undertaken by UNEP.
- A Project Steering Committee (PSC), chaired by a representative from the Ministry of Environment, and in charge of high-level governance and decision-making. A technical committee with representatives from different ministries related to the climate agenda will support the PSC, as well as an External Advisory Committee with representatives from government institutions, civil society and private sector.
- Through this project, Panamá will also actively participate in the GEF financed **CBIT Global Support Programme (CBIT-GSP)** (implemented by UNEP).

Implementing Agency

UNEP is the Implementing Agency (IA) for this project and will provide overall supervision and guidance in line with GEF and internal requirements. UNEP developed this project proposal considering its experiences, good practices and lessons learned in developing and implementing other CBIT projects. Currently, UNEP is implementing more than 30 CBIT projects, including 12 CBIT projects in Latin America and the Caribbean (LAC), as well as the **CBIT Global Support Programme (CBIT-GSP)**. As implementing agency, UNEP will ensure that the project builds on previous experiences and lessons learned in the implementation of CBIT projects and will ensure coordination with regional activities and with efforts lead through the Global Coordination Platform.

Executing Agency

The Executing Agency of this CBIT project will be the NGO Wetlands International on behalf of the Ministry of Environment, through its Climate Change Directorate as the Focal Point. This reflects the same arrangement as that of the CBIT 1, which was executed by Wetlands International. Key responsibilities of Wetlands will be to ensure technical execution according to the execution plan, ensure technical quality of products, outputs, and deliverables, ensure compilation and submission of progress reports, and overall oversee the day-to-day project execution including timely delivery of products. Responsibilities will be reflected through a legal contract called Project Cooperation Agreement (PCA), between wetlands and UNEP.

Wetlands International will furthermore facilitate communication within the project management structure and enable coordination to engage all relevant stakeholders including national and sub-national government bodies,

private sector including financial institutions, civil society, and academia on CBIT related roles. In this capacity, the agency will take care of the follow-up of all relevant procurement, financial and audit relevant reports.

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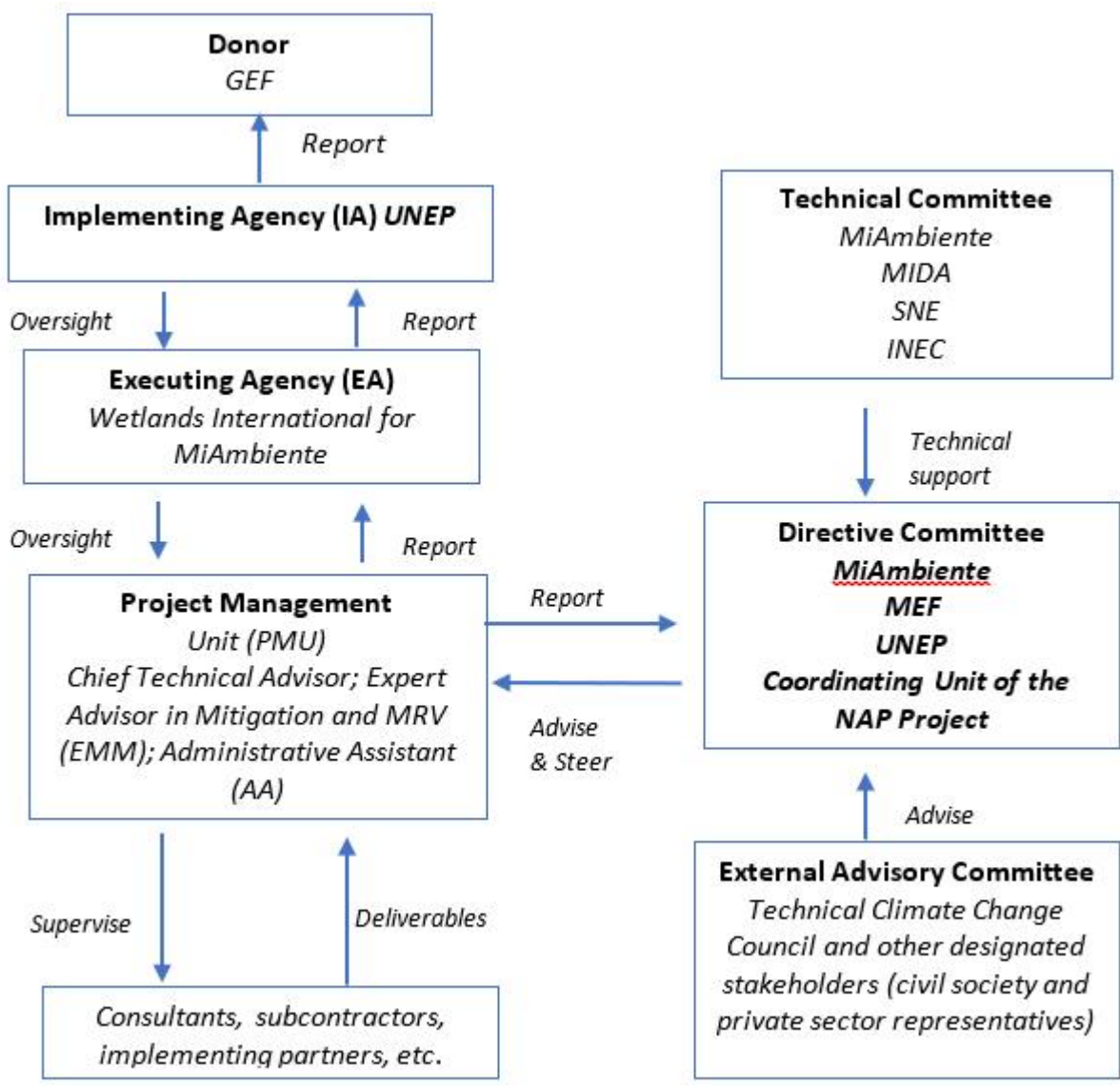
Project Steering Committee (PSC)

The project will establish a Directive Committee that will meet two times a year to ensure the advance of the project, share information and provide leadership for the key institutions involved, and will ensure the integrated coordination of activities. This Directive Committee is formed by four representatives – one each from the following institutions – Ministry of Environment, Ministry of Economy and Finance (MEF), UNEP, and the Coordinating Unit of the NAP Project. This Committee will receive technical support from a technical committee composed of the Ministry Environment, Ministry of Agricultural Development (MIDA), National Energy Secretariat (SNE), and the National Census and Statistics Institute (INEC), and advised by an external advisory committee, staffed by relevant government institutions, as well as other representatives from the civil and private sector.

Project base team

Project activities will be undertaken by a base team that will be supported by a series of consultancies that can bring in international expertise, as needed. Whenever a specific partner has not been identified during the PPG phase, consultant(s) will be selected through a competitive procurement process. Detailed terms of reference for staff and consultancies are available in Annex I.

TABLE 8. PROJECT MANAGEMENT STRUCTURE



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)

b) Cooperation with Ongoing Initiatives and Projects

TABLE . COOPERATION WITH OTHER PROJECTS

Project	Description	Actors, Timeframe	Links with CBIT 2
Development of the National Framework for Climate	Supported Panama in creating a national MRV framework for climate change transparency including the launch of the PNTC	GEF, Ministry of Environment, UNEP as implementing agency, 2020-2022. The CBIT	The outcomes of the CBIT 1 constitute the main baseline framework for informing the CBIT 2 and the gap analysis

Project	Description	Actors, Timeframe	Links with CBIT 2
Transparency of Panama (CBIT 1).	and the development of institutional arrangements, protocols, and data flows.	1 was finalized in November 2022.	provided in the Improvement Plan build the basis therein.
NC3 and BUR1 under the UNFCCC.	Assisted Panama in the preparation of its BUR1 and NC3 for the implementation of its obligations under the United Nations Framework Convention on Climate Change.	GEF, Ministry of Environment, UNDP as implementing agency, 2015-2019. The NC3 was submitted in 2018 and the BUR1 in 2019.	Information from these reports inform the baseline scenario of the CBIT 2 project.
Panama's Readiness Support Proposal.	Aim of the readiness support is to support Panama's national government in building a strong climate change policy framework to move the country toward a low-emissions economic and a climatic resilient development by enabling access to GCF funded projects for National Designated Authorities.	GCF, CAF, Ministry of Environment, 2017-2019.	The project informs the CBIT 2 on how the Ministry of Environment is capacitated in accessing financing and implementation support for a multitude of potential climate change projects that are relevant to consider for the CBIT 2.
NC4 and BUR2 under the UNFCCC.	Project Objective was to assist Panama in the preparation of its Fourth National Communication and Second Biennial Update Report (BUR2) for the implementation of the obligations under the United Nations Framework Convention for Climate Change.	GEF, Ministry of Environment, UNDP as implementing agency, 2019. The BUR2 was submitted in 2021 and the NC4 is not yet finalized.	Information from these reports inform the baseline scenario of the CBIT 2 project.
Preparation of the First Biennial Transparency Report (BTR).	Objective is to support Panama in strengthening institutional capacities to develop the First Biennial Transparency Report fulfilling the requirements as per the Enhanced Transparency Framework.	GEF, Wetlands International, UNDP as implementing agency, 2022-2024.	The CBIT 2 project will complement the preparation of the first BTR, as it seeks to capacitate Panama in sustainably preparing future BTRs. In that context, the institutional mechanisms, and procedures for the BTR preparation are to be directly strengthened by the CBIT 2.
Preparation of strategic frameworks and climate finance to reduce deforestation and forest degradation and guide the investment of the GCF in Panama.	This preparatory program supports the Ministry of Environment to enhance its REDD+ activities and improve access to climate finance and its capacity to Measuring, Reporting and Verifying (MRV) forestry activities.	GCF, Ministry of Environment, FAO as implementing agency, 2020-2022.	The MRV improvements in the forestry sector directly link to the strengthening of institutional capacities for the forestry sector personnel under the CBIT 2.
Aligning financial flows of the financial sector in Panama with the Paris Agreement climate change goals.	The objective is for Panama to enhance its capacity for managing and attracting climate finance. Key outcomes of the project are to streamline access of accredited entities to GCF funded projects and to develop strategies to increase lacking private sector investment in low emissions activities.	GCF, UNEP as implementing agency, 2022-2024.	The project informs the development of the CBIT 2 on climate finance related strategies in the country, particularly on the engagement and incorporation of private sector stakeholders.

Project	Description	Actors, Timeframe	Links with CBIT 2
Building capacities for the development of the National Adaptation Plan in the context of the NDCs adaptation themes in Panama.	Supports building sustainable country capacity and strengthen stakeholder engagement to plan, finance, implement, monitor, and report strategic adaptation processes and communicate knowledge about climate change adaptation. The capacity-building program for the National Adaptation Plan runs in parallel to the CBIT 2 and can provide information on the institutional arrangements developed for adaptation actions.	Ministry of Environment, UNEP, 2022-2025.	The capacity-building program for the National Adaptation Plan runs in parallel to the CBIT 2 and can provide information on the institutional arrangements developed for adaptation actions. Moreover, as the project seeks to link the Nap action tracking to the PNTC, alignment is highly necessary.
Capacity Building to prepare for the implementation of Carbon Markets and Article 6 in Latin America.	GCF Readiness, promotes the generation of knowledge from a regional perspective to provide the participating countries with the institutional, technical, and operational capacities to advance towards the full implementation of Article 6.	Under-Secretariat of International Financial Relations for Development, Secretariat of Strategic Affairs of the Presidency of the Nation, Argentina Ministry of Environment and Energy, Costa Rica Ministry of Environment and Natural Resources, Dominican Republic Minister of Environment and Natural Resources, El Salvador Minister of Environment and Natural Resources, Guatemala Secretary of Energy, Natural Resources, Environment and Mines, Honduras Ministry of Finance and Public Credit, Nicaragua Minister of Environment, Panama (Lead NDA), UNEP 30 months	As this Readiness proposal will provide technical capacities and tools to promote a stronger engagement of national stakeholders public and private-in carbon-based mechanisms that will enable the countries to catalyze climate financing and comply with their climate objectives, it is relevant to link the capacity building approach for the climate finance component of the CBIT 2 with this program.
PAF proposal package	Approved in 2023 and funded by NDC Partnership, aimed to integrate the teams of the Ministry of Finance and the Ministry of Environment to improve and increase climate action efforts that will lead to greater climate ambition and transparency. The activities prioritized will generate inputs to updating the information systems of the MEF and Ministry of Environment and recommendations to improve policy/ regulatory frameworks for the management of financial and economic information that guides decision-making on climate change and management of financial and economic data derived from the project portfolio	Ministry of Environment, UNEP 12 months	The CBIT 2 projects links with this PAF package because of its aim to crucially link the dedicated personnel of the Ministry of Finance and of Environment for improving the management of climate finance and associated decision-making. In other words, the CBIT 2 will seek to align the strategic direction for climate finance with the package proposals.

Summarizing, the National Framework for Climate Transparency will serve as the main mechanism for complying with international reporting and transparency requirements. Once the framework is created and its web platform is established, all national communications, BURs, NDCs' updates and all other commitments will be done following the framework and through its interactive web platform. Entities responsible for sectoral data will report their findings and analysis through the web platform where data and information will be further compiled and analyzed to fulfill reporting commitments. The public engagement mechanism will be used to ensure free, prior, and informed involvement of all relevant stakeholders, including indigenous peoples and other underrepresented minorities.

Core Indicators

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		250		
Male		250		
Total	0	500	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)

Indicator 11: It is estimated that the project will have 500 direct beneficiaries, including staff of Panamanian ministries, national and subnational decision-makers, the private sector, civil society organizations (CSOs) and other relevant stakeholders. The direct beneficiaries of the project are those whose capacity is strengthened in the project's capacity building sessions under nine outputs: 1.3, 1.4, 2.1, 2.2, 2.3, 2.4, 3.1. and 3.2. In-person and online training sessions are planned for key stakeholders under each of those outputs. It is estimated that an average of 72 unique key stakeholders will increase their capacity through each training session. Thus, it is estimated that 500 unique individuals will be trained and considered direct beneficiaries. As the gender division within the institutions to be trained is reasonably even, the assumption is that the direct beneficiaries will be split 50/50, thus ensuring gender-balanced training.

Key Risks

	Rating	Explanation of risk and mitigation measures
CONTEXT		
Climate	Low	Risk: High impact climatic events may disrupt project activities, damages infrastructure, and effect overall project execution. Mitigation : Panama experiences a series of extreme weather events including intense rainfalls, windstorms, floods, landslides, tropical cyclones, or tsunamis, which may be

		<p>exacerbated by climate change dynamics. The country is considered as highly vulnerable to climate change. As the project will be mainly conducted from Panama City, these risks can be considered somewhat reduced, as the city is usually not hit by hurricanes or other major climate events. If necessary, consultations including travel in the country will be moved to an online format. Management of data will be backed up and cloud-based, minimizing the risk of data loss</p>
<p>Environmental and Social</p>	<p>Low</p>	<p>Risk; Social unrest derived from aggravation of the COVID pandemic, international crises, extreme weather event may affect project execution. Mitigation: Social as well as environmental stability are quite secure in Panama. To mitigate any potential risks, the Project Steering Committee in collaboration with Wetlands International will rely on existing government contingency plan for handling potential social implications driven by environmental or economic occurrences.</p>
<p>Political and Governance</p>	<p>Moderate</p>	<p>Risk 1: New administration shifts priorities affecting project execution . Mitigation: In recent years and with the implementation of the CBIT 1, Panama has clearly set a focus on climate change action which makes it unlikely that policy shifts will substantially impede the project, even though general elections are to be held in 2024. To mitigate the impacts of any major political shifts the CBIT 2 project, through the Project Steering Committee and Wetlands International will seek key political support through regular briefings of the line ministries on project progress and will aim to underline alignment with major policy targets of the country. The latter can be achieved through participation and contribution of Wetlands International in national debates and process for the NDC and the Long-term Emissions Reductions Strategy. Moreover, the implementation of the CBIT 2 will be governed by nationally adequate mechanisms, following nationally accepted customs and decision-making processes for which national stakeholders will be consulted Risk 2 Change in macroeconomic situation may affect priority setting for budget allocation, hampering the PNTC development and maintenance. Mitigation: Panama´s economy took a substantial plunge as a result of the impact of the Covid-19 pandemic, which increased economic pressure across sectors. However, 2021 marked a return to high economic growth and the forecasts continue to look relatively favorable and economic priority setting for climate change activities is proclaimed. Nevertheless, major macro-economic shocks, albeit unlikely, may of course hamper the funding security for the national MRV system, in particular for the PNTC as platform maintenance requires recurrent financial resources. However, as centrally integrated within the Ministry of Environment, and generally manageable costs for maintenance, the macro-economic risk can be assessed as low. On the other hand, during the development phase of the platform, economic shocks may inhibit adequate finalization of the platform in the coming 3 years. The economic outlook looks favorable, unforeseen circumstances may thus still present a risk. To mitigate</p>

		<p>such risk, the funding for the necessary developments on the platform should be secured promptly as since the CBIT 2 is financed by the GEF such financing will likely be ensured even in a case of an economic shock in Panama. Risk 3 Risk: Shift in government strategies and policies may impede the project implementation. Mitigation: Similar to the risks emanating from political and governance risks, shifting strategies and policies may either support or impede the project implementation. It is however not likely, that the CBIT 2 project will see stark policy opposition during the implementation phase as it on the one hand constitutes a continuation of a successfully implemented CBIT 1 and as it is on the other hand is strongly aligned with key national climate change targets. The Projects’ Steering Committee (PSC), with the support of the Advisory Body will be the key actors in the implementation structure to monitor this risk and ensure that the project remains aligned with national priorities.</p>
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INNOVATION

Institutional and Policy	Low	<p>Risk :Institutional capacity for implementation and sustainability Lack of institutional capacity may cause challenges for successful project implementation and sustainability Mitigation: Lack of institutional capacity may cause a series of problems for successful project implementation. These can include a lack of technical capacity in certain key institutions to implement specific activities of the project as well as limited skill and capacity retention as a result of staff turnover and imperfect knowledge sharing systems. These risks are however not too stark in Panama, as the country has successfully and skillfully implemented the CBIT 1 project with a similar institutional setup and there is indication of strong engagement of national stakeholders. The risk should be reduced by actively ensuring cross-institutional knowledge sharing facilitated by the Ministry of Environment as well as a prudent capacity-building approach that builds lasting capacities in institutions with tools to pass on skills internally instead of only in certain individuals. The project activities include the development of the knowledge hub as part of the PNTC, as well as the elaboration of a strategy for long- term capacity building</p>
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Technological	Moderate	<p>Risk: Project design may evidence misalignment with country priorities and capacities . Mitigation: Missing alignment of the project design and national priorities as well as overly ambitious design of certain activities may cause issues in the implementation process. These risks however can be mitigated relatively straightforward by applying a close-to-country consultative approach aiming to gather continuous feedback and approval to ensure alignment and feasibility.</p>
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Financial and Business Model		
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EXECUTION

Capacity	Low	Lack of institutional capacity may cause a series of problems for successful project implementation. These can include a lack of technical capacity in certain key institutions to implement specific activities of the project as well as limited skill and capacity retention as a result of staff turnover and imperfect knowledge sharing systems. These risks are however not too stark in Panama, as the country has successfully and skillfully implemented the CBIT 1 project with a similar institutional setup and there is indication of strong engagement of national stakeholders. The risk should be reduced by actively ensuring cross-institutional knowledge sharing facilitated by the Ministry of Environment as well as a prudent capacity-building approach that builds lasting capacities in institutions with tools to pass on skills internally instead of only in certain individuals. The project activities include the development of the knowledge hub as part of the PNTC, as well as the elaboration of a strategy for long- term capacity building
Fiduciary	Low	Risk: Slow or complex processes lead to delays in budget execution. Mitigation : the maintenance and operation of the PNTC is associated with costs, for which funding needs to be made available of a continuous basis. Wetlands has successfully executed CBIT 1, providing expertise in execution of GEF funded projects. As a general mitigation approach regarding budget planning, yearly procurement plans, including contingency analyses and mitigation plans for risks affecting key procurement processes should be prepared by the implementing partners. Moreover, Staff will be cross trained so that leave absences do not affect procurement processes
Stakeholder	Moderate	Lack of stakeholder engagement is a key risk inherent to project implementation and has the potential to strongly influence the outcomes. More specifically, a lack of public consent over the public engagement mechanism to be pursued may impede the project from successful implementation. Furthermore, the buy-in of stakeholders to submit information to and use the PNTC is essential to bring the project to fruition. Hence it is necessary that a strongly participative and consultative approach is implemented with national stakeholders to ensure national appropriation and buy-in as well as continuous engagement. A gender- and culturally sensitive stakeholder engagement and communication strategy for the PNTC will be designed and implemented with key stakeholders and will be regularly monitored
Other	Low	Risk: Lack of support to establish institutional enabling environment. Establishing an institutional enabling environment, including legally approved and formalized institutional arrangements, including procedures, forms and terms to access and transfer climate data to the PNTC is key to project implementation, to achieve expected results. Although legal approval of institutional arrangements for the transfer of data to the PNTC is underway, has not yet been completed. Active engagement with relevant stakeholders (participating in public consultations), Projects' Steering Committee (PSC)

		and other government actors involved in the approval process, should be pursue to mitigate this risk.
Overall Risk Rating	Low	The risks to implementation of the CBIT 2 project are generally well manageable if a country-focused approach is fostered and if contingency plans for the unlikely events of strong environmental or economic stresses and associated political priority shifts are implemented.

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)

his CBIT project addresses Pillar II (Foster enabling conditions to mainstream mitigation concerns into sustainable development strategies) and objective 2.1 (Support capacity-building needs for transparency under the Paris Agreement through the CBIT) of the GEF-8 Climate Change Focal Area Strategy.

The GEF-8 Climate Change Focal Area Strategy aims to support developing countries to make transformational shifts towards low emission and climate-resilient development pathways through large-scale integrated programs. The CBIT, as per paragraph 85 of the COP decision adopting the Paris Agreement, complies with this Focal Area Strategy by:

- Strengthening national institutions for transparency-related activities in line with national priorities.
- Providing relevant tools, training, and assistance for meeting the provisions stipulated in Article 13 of the Agreement-
- Assisting in the improvement of transparency over time.

As such, the CBIT project seeks to strengthen institutions to coordinate, manage and implement climate transparency activities in line with national priorities. It will:

- Enhance the design and operational readiness of the PNTC, including the stronger integration of the different databases as interconnected modules. (1.1.).
- Strengthen the institutional arrangements of the national transparency system for climate change (1.2.).
- Develop institutional arrangements between national stakeholders to ensure the effective provision and tracking of adaptation data in the PNTC (1.2.).
- Build institutional and human capacity to use the PNTC and for preparing transparency reports and developing public policy (1.3.1.4; 2.1.; 2.2.; 2.3.; 2.4., 3.1,3.2).

- Ensure that key public and private sector stakeholders are aware of the PNTC and climate action in Panama, understand its value, and are engaged in national climate change activities (1.4)
- Create institutional arrangements which ensure that climate data made available through the national transparency system support national and sub-national planning (3.2).

The project also aims to build databases, tools, templates and capacity for using the national GHG inventory report module (SSINGEI) (Output 2.1), the adaptation modules M&E, SNDA and RENA-A for actions (Output 2.2 and Output 2.3), the mitigation action module (RENA-M) (Output 2.3), The means of implementation module to track support needed and received (ReNMI) (Output 2.4). These modules will support national and sub-national decision- and policymakers in incorporating climate data into national decision-making and planning processes (Output 3.1. and Output 3.2).

Moreover, the improvement of transparency over time will be enabled by several strategies:

- Strategies for integrating PNTC information into efforts to prepare a long-term low emission and climate resilient development strategy (Output 3.1).
- Establishing institutional arrangements which embed the PNTC within government structures, ensuring an effective coordination in the provision of data, data quality assurance and control, and operation of the platform as well as an effective and efficient provision of data to populate and maintain an up-to-date PNTC will enable the continuous enhancement of transparency. This will also be possible due to the design and implementation of various capacity building approaches on climate transparency activities and on the use of the platform which will include the preparation of transparency reports and public policymaking.
- Developing the database and related tools, templates, and capacity for the tracking the NDC implementation progress will enhance synergies among government actions and allow for its updating in the future (Output 2.3).
- Elaborating and implementing a stakeholder communication and engagement strategy will help raise awareness and engagement of stakeholders on climate change matters and disseminate the Paris Agreement (Output 1.4.)
- Ensuring national policy- and decision-makers more effectively incorporate climate data and projections into their regulatory and planning processes, which will allow for better informed policy-making while mainstreaming climate change transparency in the country's overall planning and policy landscape – national policies and strategies will be designed and updated in a transparent manner, based on the quality information to be provided by the PNTC and constantly updated further on (Outputs 3.1, 3.2).

Therefore, the project not only will enhance Panama's capacity to effectively implement the Paris Agreement, and potentially contribute to increased NDC ambition, but it will also enhance Panama's capacity to report to other non-UNFCCC multilateral environmental agreements, covering improved indicators tracked for biodiversity, gender, health, agricultural, energy security, education and waste and sanitation, allowing for a streamlined approach across international reporting commitments of the country. As such, the project is fully aligned with national priorities.

This proposal is also aligned with the four results of the United Nations Framework Agreement for Sustainable Development (UNSDPF) with Panama result 2 - Governance and institutional setting development, and 3- Integrated environmental management.

The project also aligns with UNEP's objectives and strategies. Firstly, it is aligned with UNEP midterm strategy 2022- 2025 – Outcome 3: State and non-state actors adopt the enhanced transparency framework arrangements under the Paris Agreement, by helping countries to meet their transparency and other reporting obligations. Regarding the UNEP 2022-2023 Programme of Work, the project contributes to the strategic objective of Climate stability. In particular, will directly support UNEP in implementing the following outcomes 1.1- Policymaking and decision making for climate action are informed by the latest science-based analysis and data generation, 1.2: carbon neutrality and resilience are integrated into climate planning and policy and regulatory frameworks at all levels, 1.3: transparency and accountability of government and non-government climate action, including from the private sector and the financial community, are strengthened, 1.6 Private and public financial flows are aligned with the goals of the Paris Agreement. The project is part of the UNEP Program Coordination Project for Science and Transparency.

UNEP will facilitate coordination with the UN Country Team and Resident Coordinator, ensuring they are informed of the project's progress and that it aligns with the Panama's UNSDPF, specifically through UNEP Latin America and Caribbean Office in Panamá.

The project will facilitate Panama's participation in the **CBIT Global Support Programme (CBIT-GSP)**. Sharing lessons learned and experiences under the platform will ensure alignment of this CBIT project with other national, regional, and global transparency initiatives. Furthermore, through south – south cooperation, the project will also draw on experiences, good practices and lessons learned of countries in the region executing their CBIT projects, as made available on the, such as webinars and workshops

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?

Yes

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

Yes

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; **No**

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

Executor or co-executor;

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 the section B project description?

Yes

Environmental and Social Safeguard (ESS) Risks

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		

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.

Yes

Benefits

Describe the socioeconomic benefits to be delivered by the project at the national and local levels, as appropriate and these benefits translate in supporting the achievement of global environmental benefits (GEF Trust Fund) or adaptation benefits (LDCF, SCCF). This section identifies the direct beneficiaries from the project.

Global Environmental Benefits and Socioeconomic Benefits

The global environmental impacts generated by this project are directly related to the implementation of the ETF in Panamá. The project strengthens the country capacity to accurately report in the areas of national GHG inventories, mitigation, and vulnerability and adaptation to climate change impacts, NDC tracking, tracking support needed and received. It will also lead to a better integration of climate change into policy making, allowing for a better alignment with the UNFCCC obligations, national development needs and priorities, as well as the SDGs.

The project will contribute to enhance Panama's capacity to effectively implement the Paris Agreement, and potentially contribute to increased NDC ambition. It is estimated that the project will have 500 direct beneficiaries benefiting from capacity building activities, including staff of Panamanian ministries, national and subnational decision-makers, the private sector, civil society organizations (CSOs) and other relevant stakeholders, of which 50% are expected to be women. The access to more reliable data and improved reporting will also improve the information provided to the global Stock take, enhancing the overall capacity to track the actual progress towards the long-term temperature goals of the Paris Agreement. The project will additionally enhance Panama's capacity to report to other non-UNFCCC multilateral environmental agreements, such as the SDGs and the MEAs, strengthening a streamlined approach across international reporting commitments of the country.

The improve National Climate Transparency Platform will ensure better access to climate change information to develop well informed viable strategies to increase resilience in marginalized communities, which are particularly prone to climate hazards. Frequently affected by floods and landslides, these events have widespread implications for the economic, social, and psychological welfare of vulnerable communities. Responding effectively and timely to these risks requires the strategic combination of updated information and decision-making, thereby creatively linking the expertise, efforts and actions of diverse stakeholders, including local government, scientists, industry experts, and the communities themselves. To achieve this, the PNTC represents an integrated tool of interconnectivity between the sectors and disciplines to manage climate change commitments and impacts.

The CBIT 2 project will assist Panama in achieving the Sustainable Development Goals (SDG), and more specifically, SDG 13, by supporting the integration of climate change measures into national policies, strategies and planning, building knowledge and improving education, awareness-raising and human and institutional capacity on climate change issues, and promotion of mechanisms for raising capacity for effective climate change-related planning and management in the country.

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	Programm ing of Funds	Grant / Non- Grant	GEF Project Grant(\$)	Agency Fee(\$)	Total GEF Financing (\$)
UNEP	GET	Panama	Climate Change	CBIT Set- Aside	Grant	1,500,000.0 0	142,500 .00	1,642,500.00
Total GEF Resources (\$)						1,500,000.0 0	142,500 .00	1,642,500.00

Project Preparation Grant (PPG)

Is 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(\$)
UNEP	GET	Panama	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	1,500,000.00	421,360.00
Total Project Cost (\$)		1,500,000.00	421,360.00

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	In-kind	Recurrent expenditures	250,000.00
Civil Society Organization	Wetlands International	In-kind	Recurrent expenditures	171,360.00
Total Co-financing (\$)				421,360.00

Please describe the investment mobilized portion of the co-financing

Not applicable

ANNEX B: ENDORSEMENTS

GEF Agency(ies) Certification

GEF Agency Type	Date	Project Contact Person	Phone	Email
GEF Agency Coordinator		Victoria Luque		victoria.luque@un.or
Project Coordinator		Asher Lessels		Asher.lessels@un.org

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

Name of GEF OFF	Position	Ministry	Date (Month, day, year)
Raul Pinedo	Economic Affairs Analyst	Ministry of Environment	12/21/2022

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.

Result framework tables can be found in Page 79 of attached project document

Project Objective	Objective level Indicators	Baseline	Mid-term target	End of project Target	Means of Verification	Risks
To strengthen the national transparency system in Panama (PNTC) to meet the requirements of the Enhanced Transparency Framework (ETF) under the Paris Agreement on Climate Change	Indicator A (= core indicator 11): Direct project beneficiaries disaggregated by gender (individual)	0	200	500 beneficiaries (50% are women)	Project reports and capacity building attendance lists.	4 (lack of stakeholder engagement risk), 5 (gender risk)
	Indicator B: Quality of MRV Systems	Score = 5 (Measurement systems are strong for a limited set of activities and periodically report on key GHG related indicators i.e. mainstreamed into the activity. implementation; reporting is improved through few pathways but limited audience and formats; verification limited	Score = 5	Score=8 (Strong standardized measurements processes established for key indicators and mainstreamed into institutional policy implementation; reporting is widely available in multiple formats, verification is done for a larger set of information	The score will be the average of the scores attributed by at least 3 representatives of the steering committee and/or advisory body based on the use of the system and on the project manager's progress implementation reports. The project manager shall include a one-page annex to each yearly PIR on the quality of Panama's MRV system, including the evaluators' reports. The Terminal Evaluation will include a revision on the validity of the assumptions and criteria used to establish the baseline and end-of-project scores.	2 (lack of political prioritization risk), 4 (lack of stakeholder engagement risk)

	Indicator C: Qualitative assessment of institutional capacity for transparency-related activities	Score = 3 (Designated transparency institution has an organizational unit with standing staff with some capacity to coordinate and implement transparency activities under Article 13 of the Paris Agreement. Institution has authority or mandate to coordinate transparency activities under Article 13. Activities are not integrated into national planning or budgeting activities)	Score = 3	Score=4 (Designated transparency institution(s) has an organizational unit with standing staff with some capacity to coordinate and implement transparency activities. Institution(s) has clear mandate or authority to coordinate activities under Article 13 of the Paris Agreement, and activities are integrated into national planning and budgeting activities.)	The score will be the average of the scores attributed by at least 3 representatives of the steering committee and/or advisory body based on the use of the system and on the project manager's progress implementation reports. Following the availability of the initial system diagnosis and design the project manager should include in the yearly PIRs a technical annex on how the quality of Panama's MRV system is being improved through the project actions, including the evaluators' reports...	2 (lack of political prioritization risk), 4 (lack of stakeholder engagement risk)
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Note: Indicator B: Quality of MRV systems. The score is determined on a 1 to 10 scale according to GEF's Annex III of CBIT programming directions. The baseline score of 5 is derived from the assessment provided in Panama's CBIT I Project Implementation Report (PIR) for the fiscal year 2022. In the PIR, the baseline score was rated as 3, and by the end of 2022, progress had increased by +2. This progress was adopted as the baseline for CBIT II.

Indicator C: Qualitative assessment of institutional capacity for transparency-related activities. The score is evaluated on a scale of 1 to 4 following GEF's programming directions Annex IV. The initial score of 3 is established based on the baseline and end-of-project target outlined in the PIR 2022 for CBIT I. In this assessment, the baseline score was 2, with a target of +1, and received a highly satisfactory progress rating.

Project Outcomes	Outcome level Indicators	Baseline	Mid-term target	End of project Target	Means of Verification	Risks
1. The Government of Panama tracks, measures and transparently reports climate data through a national transparency system aligned with the UNFCCC Enhanced Transparency Framework (ETF)	Indicator 1: (#) of MRV components (subsystems) fully covered by institutional arrangements under the MRV system	2 (institutional arrangements are in place for some sectors/areas within subsystems such as SSINGEI and Climate Finance MRV- ReNMI)	3	4 (GHG Inventory-SSINGEI, Adaptation (SNDA), Mitigation (RENE); Climate Finance- ReNMI)	Project reports and stakeholder validation reports	2 (lack of political prioritization risk), 3 (procurement risks) 4 (lack of stakeholder engagement risk)

2. The Government of Panama produces more accurate and complete data for all ETF components	Indicator 2: Progress (%) in developing fully functional and operational gender-responsive modules within the PNTC (SSINGEI, M&E, RENA, ReNMI and SNDA)	35%	50%	85% (SSINGEI, M&E, RENA, ReNMI, SNDA)	Project reports and detailed design of PNTC	2 (lack of political prioritization risk), 3 (procurement risks) 4 (lack of stakeholder engagement risk)
3. The Government of Panama streamlines climate change into national and sub-national policy development	Indicator 3: PNTC is officially used to support the preparation of ETF reports and national planning processes	The PNTC is the centralized climate transparency system of Panama but lacks tools for streamlining information for planning processes.	n.a	Functionalities and protocols related to streamlining PNTC into LT-LEDS and NDC and a function to track PNTC use are implemented.	Project reports, and detailed design of PNTC	2 (lack of political prioritization risk), 3 (procurement risks) 4 (lack of stakeholder engagement risk) 5 (gender risk) 8 (lack of institutional coordination)

Outcome 1. Government of Panama tracks, measures and transparently reports climate data through a national transparency system aligned with the UNFCCC Enhanced Transparency Framework (ETF)					
Project Outputs	Output level indicators	Baseline	Mid term target	End of project target	Means of verification
1.1. An enhanced PNTC, being more user-friendly, secure, gender and culturally sensitive, and broad reaching is accessible to stakeholders	(#) PNTC cybersecurity and contingency plan developed	0	-	1 cybersecurity and contingency plan developed	Project reports
1.2. Institutional arrangements for entities to provide data for and use data of the National Climate Transparency Platform (PNTC) strengthened	(#) of Sectors with Institutional arrangements finalized (IPPU, Waste, LULUCF)	0	-	3 sector Institutional arrangements are finalized (IPPU, Waste and LULUCF)	Project reports / stakeholders reports
1.3. A national capacity building programme for using the PNTC is designed and made accessible to national stakeholders through the PNTC knowledge hub	(#) Training sessions for trainers carried out	0	-	5 training sessions carried out	Project Report and List of attendance

1.4 A gender- and culturally sensitive stakeholder engagement and communication strategy for the PNTC is designed and implemented with key stakeholders.	(# of new stakeholders actively engaged in the PNTC during project execution, disaggregated by gender	0	25 (50% are women)	50 (50% are women)	Annual reports on strategy implementation
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Outcome 2. The Government of Panama produces more accurate and complete data for all ETF components					
Project Outputs	Output level indicators	Baseline	Mid term target	End of project target	Means of verification
2.1. Gender-responsive tools and templates are available to national stakeholders and their capacity is enhanced for using the PNTC GHG inventory module (SSINGEI).	(# of sectors with data sharing modalities, methodology and templates finalized for the GHG module (IPPU, Waste, LULUCF)	0	1 out of 3 sectors with data sharing modalities, methodology and templates finalized	3 sectors with data sharing modalities, methodology and templates finalized (IPPU, Waste, LULUCF)	Project Report and stakeholders' reports
2.2. Gender-responsive tools and templates are available to national stakeholders and their capacity is enhanced for using the Adaptation Actions Registry (RENA-A) and the PNTC adaptation module.	(# of capacity-building sessions for the PNTC adaptation modules carried out	0	-	3 capacity-building sessions for the PNTC adaptation modules carried out	Project report and List of attendance
2.3. Gender-responsive tools and templates are available to national stakeholders and their capacity is enhanced for tracking the NDC and mitigation footprint and for using the using the actions registry (RENA) for mitigation and adaptation.	(# of capacity-building sessions for the tracking progress on the NDC carried out	0	-	2 capacity-building sessions for the tracking progress on the NDC carried out	Project report and List of attendance
2.4. Gender-responsive tools and templates are available to national stakeholders and their capacity is enhanced to use the climate finance module (ReNMI) for tracking climate finance.	Progress (%) in development of a methodology and PNTC functionalities for tracking international climate finance received, identifying climate finance needed and reporting to UNFCCC	0%	20%	100% (Methodology and PNTC functionalities fully developed)	Project Reports / detailed design of PNTC - ReNMI module

Outcome 3. The Government of Panama streamlines climate change into national and sub-national policy development

Project Outputs	Output level indicators	Baseline	Mid term target	End of project target	Means of verification
3.1. Tools are available to national stakeholders and their capacity is enhanced for developing climate change policies through the PNTC	(#) of capacity-building sessions on the elaboration of the LT-LEDS using the PNTC	0	-	2 capacity-building sessions on the elaboration of the LT-LEDS using the PNTC	Project Report and List of attendance
3.2. The use of the PNTC is integrated into decision making processes and the capacity of national decisionmakers is enhanced for integrating climate change data into public planning.	Progress (%) in development of a Methodology and indicators tracking PNTC use for national and local policymaking	0	20%	100% (Methodology and indicators tracking PNTC use for national and local policymaking fully developed)	Project Reports

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
Consultant hired for Project design	50,000.00	25,000.00	0.00
Total	50,000.00	25,000.00	0.00

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
Panama City	9.33404	-79.89172	3,702,057

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Panama	9	-80	3,703,430

Location Description:

Activity Description:

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



ANNEX F: ENVIRONMENTAL AND SOCIAL SAFEGUARDS SCREEN AND RATING

Attach agency safeguard screening/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.

Title

Annex __ Environmental and Social Safeguards

ANNEX G: BUDGET TABLE

Please explain any aspects of the budget as needed here

GEF FORMAT

GEF budget category & detailed description	Outcome 1	Outcome 2	Outcome 3	Outcome 4	Outcome 5	Subtotal	M&E	PMC	Total	Responsible entity
02. Goods	10,000					10,000	10,000		20,000	
Staff IT equipment						10,000	10,000		10,000	MiAmbiente (Ministry of Environment)
Support IT equipment	10,000					10,000			10,000	MiAmbiente (Ministry of Environment)
06. Sub-contract to executing partner/entity	27,000	20,000				47,000			47,000	
Videography subcontract	12,000					12,000			12,000	MiAmbiente (Ministry of Environment)
Graphic design subcontract		20,000				20,000			20,000	MiAmbiente (Ministry of Environment)
University Capacity Programme	15,000					15,000			15,000	MiAmbiente (Ministry of Environment)
07. Contractual services (company)	85,000		65,000			150,000	44,500		194,500	
Climate change knowledge consultancy	75,000					75,000			75,000	MiAmbiente (Ministry of Environment)
Climate Change policy consultancy	10,000		65,000			75,000			75,000	MiAmbiente (Ministry of Environment)
Translation services							4,500		4,500	MiAmbiente (Ministry of Environment)
Mid Term and Terminal Evaluation							40,000		40,000	UNEP
08. Contractual services (individuals)	192,600	48,400	30,000			271,000		13,500	284,500	
National IT Consultant	57,600	38,400				96,000			96,000	MiAmbiente (Ministry of Environment)
Gender Expert	35,000					35,000			35,000	MiAmbiente (Ministry of Environment)
Indigenous People Expert	57,000					57,000			57,000	MiAmbiente (Ministry of Environment)
Climate modelling and LTS Consultant			30,000			30,000			30,000	MiAmbiente (Ministry of Environment)
NDC Consultant	5,000	10,000				15,000			15,000	MiAmbiente (Ministry of Environment)
Communication and Engagement Expert	38,000					38,000			38,000	MiAmbiente (Ministry of Environment)
Independent financial audit								13,500	13,500	MiAmbiente (Ministry of Environment)
09. International Consultants	5,000	60,000				65,000			65,000	
Climate Finance Consultancy	5,000	60,000				65,000			65,000	MiAmbiente (Ministry of Environment)
10. Local Consultants	154,250	145,750	9,000			309,000			309,000	
Carbon Footprint Consultant		20,000				20,000			20,000	MiAmbiente (Ministry of Environment)
Legal Consultant	36,000		9,000			45,000			45,000	MiAmbiente (Ministry of Environment)
GHG Consultants	78,000	66,000				144,000			144,000	MiAmbiente (Ministry of Environment)
Adaptation consultants	40,250	59,750				100,000			100,000	MiAmbiente (Ministry of Environment)
11. Salary and benefits/Staff Costs	115,000	125,500	26,000			266,500	9,500	75,000	351,000	
Chief Technical Advisor	34,000	42,500	13,000			89,500	9,500	21,000	120,000	MiAmbiente (Ministry of Environment)
Administrative assistant								54,000	54,000	MiAmbiente (Ministry of Environment)
National IT Expert	48,000	38,000	4,000			90,000			90,000	MiAmbiente (Ministry of Environment)
Senior Transparency Officer	33,000	45,000	9,000			87,000			87,000	MiAmbiente (Ministry of Environment)
12. Training, Workshops, Meetings	30,500	46,100	11,500			88,100	10,000		98,100	
Capacity building and engagement workshops	22,000	40,000	10,000			72,000			72,000	MiAmbiente (Ministry of Environment)
Inception workshop							5,000		5,000	MiAmbiente (Ministry of Environment)
Closure Workshop							5,000		5,000	MiAmbiente (Ministry of Environment)
Materials for workshops	8,500	6,100	1,500			16,100			16,100	
13. Travel	20,000	20,000	9,400			49,400			49,400	
International and national travel	20,000	20,000	9,400			49,400			49,400	
14. Office supplies	10,000	15,500	9,500			35,000		9,000	44,000	
Office supplies								9,000	9,000	MiAmbiente (Ministry of Environment)
Logistics and office supplies for technical team	10,000	15,500	9,500			35,000			35,000	
15. Other operating costs								37,500	37,500	
Other admin. Costs (procurement, HR, or legal costs)								37,500	37,500	MiAmbiente (Ministry of Environment)
Grand Total	649,350	481,250	160,400	0	0	1,291,000	74,000	135,000	1,500,000	

UNEP FORMAT

Component	Previous code (optional)	Unique BL	Description	Executing Agency	Year 1	Year 2	Year 3	Total	UMOJA description	Contract ID
Project Title:		Panama CBIT II								
Lead Executing Agency:		MiAmbiente								
Budget version:		Rev0								
COMPONENT 1										
		C1110101	Chief Technical Advisor	MiAmbiente (Ministry)	19,000	10,000	5,000	34,000	Staff & Personnel (Including Consultants)	110101
		C1110104	Senior Transparency Officer	MiAmbiente (Ministry)	19,500	8,250	5,250	33,000	Staff & Personnel (Including Consultants)	110104
		C1110103	National IT Expert	MiAmbiente (Ministry)	16,000	14,000	18,000	48,000	Staff & Personnel (Including Consultants)	110103
		C1110503	Logistics and office supplies for technical	MiAmbiente (Ministry)	3,500	3,500	3,000	10,000	Supplies, Commodities & Materials	110503
		C1110405	Videography subcontract	MiAmbiente (Ministry)	-	3,000	9,000	12,000	Contractual services	110405
		C1110302	Support IT Equipment	MiAmbiente (Ministry)	10,000	-	-	10,000	Equipment, Vehicles & Furniture	110302
		C1110105	National IT Consultant	MiAmbiente (Ministry)	38,400	9,600	9,600	57,600	Staff & Personnel (Including Consultants)	110105
		C1110106	Gender Expert	MiAmbiente (Ministry)	14,600	14,600	5,800	35,000	Staff & Personnel (Including Consultants)	110106
		C1110109	Legal Consultant	MiAmbiente (Ministry)	11,000	25,000	-	36,000	Staff & Personnel (Including Consultants)	110109
		C1110110	GHG Consultants	MiAmbiente (Ministry)	53,000	12,500	12,500	78,000	Staff & Personnel (Including Consultants)	110110
		C1110111	Adaptation consultants	MiAmbiente (Ministry)	11,000	24,250	5,000	40,250	Staff & Personnel (Including Consultants)	110111
		C1110502	Materials for workshops	MiAmbiente (Ministry)	2,250	3,750	2,500	8,500	Supplies, Commodities & Materials	110502
		C1110401	Climate change knowledge consultancy	MiAmbiente (Ministry)	7,500	45,000	22,500	75,000	Contractual services	110401
		C1110601	University Capacity Programme	MiAmbiente (Ministry)	-	10,500	4,500	15,000	Transfers & Grants to Other Implementing	110601
		C1110407	Capacity building and engagement	MiAmbiente (Ministry)	5,940	9,940	6,120	22,000	Contractual services	110407
		C1110201	International and national travel	MiAmbiente (Ministry)	8,000	8,000	6,000	20,000	Travel	110201
		C1110113	NDC Consultant	MiAmbiente (Ministry)	-	2,500	2,500	5,000	Staff & Personnel (Including Consultants)	110113
		C1110403	Climate Change policy consultancy	MiAmbiente (Ministry)	-	-	10,000	10,000	Contractual services	110403
		C1110402	Climate Finance Consultancy	MiAmbiente (Ministry)	2,500	2,500	-	5,000	Contractual services	110402
		C1110404	Communication and Engagement Expert	MiAmbiente (Ministry)	12,000	12,000	14,000	38,000	Contractual services	110404
		C1110107	Indigenous People Expert	MiAmbiente (Ministry)	19,000	19,000	19,000	57,000	Staff & Personnel (Including Consultants)	110107
Component 1 Total					251,190	237,890	160,270	649,350		
COMPONENT 2										
		C2110104	Senior Transparency Officer	MiAmbiente (Ministry)	7,500	16,500	21,000	45,000	Staff & Personnel (Including Consultants)	110104
		C2110503	Logistics and office supplies for technical	MiAmbiente (Ministry)	3,000	7,000	5,500	15,500	Supplies, Commodities & Materials	110503
		C2110110	GHG Consultants	MiAmbiente (Ministry)	-	51,480	14,520	66,000	Staff & Personnel (Including Consultants)	110110
		C2110407	Capacity building and engagement	MiAmbiente (Ministry)	11,000	20,400	8,600	40,000	Contractual services	110407
		C2110502	Materials for workshops	MiAmbiente (Ministry)	1,500	3,050	1,550	6,100	Supplies, Commodities & Materials	110502
		C2110201	International and national travel	MiAmbiente (Ministry)	4,000	11,000	5,000	20,000	Travel	110201
		C2110109	Legal Consultant	MiAmbiente (Ministry)	-	-	-	-	Staff & Personnel (Including Consultants)	110109
		C2110101	Chief Technical Advisor	MiAmbiente (Ministry)	15,000	17,500	10,000	42,500	Staff & Personnel (Including Consultants)	110101
		C2110103	National IT Expert	MiAmbiente (Ministry)	6,000	18,000	14,000	38,000	Staff & Personnel (Including Consultants)	110103
		C2110406	Graphic design subcontract	MiAmbiente (Ministry)	-	10,000	10,000	20,000	Contractual services	110406
		C2110111	Adaptation consultants	MiAmbiente (Ministry)	-	30,420	29,330	59,750	Staff & Personnel (Including Consultants)	110111
		C2110105	National IT Consultant	MiAmbiente (Ministry)	-	28,800	9,600	38,400	Staff & Personnel (Including Consultants)	110105
		C2110108	Carbon Footprint Consultant	MiAmbiente (Ministry)	20,000	-	-	20,000	Staff & Personnel (Including Consultants)	110108
		C2110113	NDC Consultant	MiAmbiente (Ministry)	3,333	6,667	-	10,000	Staff & Personnel (Including Consultants)	110113
		C2110402	Climate Finance Consultancy	MiAmbiente (Ministry)	27,000	33,000	-	60,000	Contractual services	110402
Component 2 Total					98,333	253,817	129,100	481,250		
COMPONENT 3										
		C3110101	Chief Technical Advisor	MiAmbiente (Ministry)	-	6,500	6,500	13,000	Staff & Personnel (Including Consultants)	110101
		C3110104	Senior Transparency Officer	MiAmbiente (Ministry)	-	4,950	4,050	9,000	Staff & Personnel (Including Consultants)	110104
		C3110503	Logistics and office supplies for technical	MiAmbiente (Ministry)	2,000	4,000	3,500	9,500	Supplies, Commodities & Materials	110503
		C3110112	Climate modelling and LTS Consultant	MiAmbiente (Ministry)	-	15,000	15,000	30,000	Staff & Personnel (Including Consultants)	110112
		C3110403	Climate Change policy consultancy	MiAmbiente (Ministry)	-	28,000	37,000	65,000	Contractual services	110403
		C3110103	National IT Expert	MiAmbiente (Ministry)	-	800	3,200	4,000	Staff & Personnel (Including Consultants)	110103
		C3110109	Legal Consultant	MiAmbiente (Ministry)	-	-	9,000	9,000	Staff & Personnel (Including Consultants)	110109
		C3110407	Capacity building and engagement	MiAmbiente (Ministry)	-	5,000	5,000	10,000	Contractual services	110407
		C3110502	Materials for workshops	MiAmbiente (Ministry)	-	750	750	1,500	Supplies, Commodities & Materials	110502
		C3110201	International and national travel	MiAmbiente (Ministry)	-	4,000	5,400	9,400	Travel	110201
Component 3 Total					2,000	69,000	89,400	160,400		
MONITORING & EVALUATION (M&E)										
		ME110301	Staff IT equipment	MiAmbiente (Ministry)	7,500	2,500	-	10,000	Equipment, Vehicles & Furniture	110301
		ME110101	Chief Technical Advisor	MiAmbiente (Ministry)	3,500	3,000	3,000	9,500	Staff & Personnel (Including Consultants)	110101
		ME110408	Inception workshop	MiAmbiente (Ministry)	5,000	-	-	5,000	Contractual services	110408
		ME110409	Closure Workshop	MiAmbiente (Ministry)	-	-	5,000	5,000	Contractual services	110409
		ME110410	Translation services	MiAmbiente (Ministry)	1,485	1,530	1,485	4,500	Contractual services	110410
		ME110412	Mid Term and Terminal Evaluation	UNEP	-	-	40,000	40,000	Contractual services	110412
M&E Total					17,485	7,030	49,485	74,000		
PROJECT MANAGEMENT COSTS (PMC)										
		PM110101	Chief Technical Advisor	MiAmbiente (Ministry)	7,500	7,500	6,000	21,000	Staff & Personnel (Including Consultants)	110101
		PM110102	Administrative assistant	MiAmbiente (Ministry)	18,000	18,000	18,000	54,000	Staff & Personnel (Including Consultants)	110102
		PM110501	Office supplies	MiAmbiente (Ministry)	3,000	3,000	3,000	9,000	Supplies, Commodities & Materials	110501
		PM110411	Independent financial audit	MiAmbiente (Ministry)	4,000	4,500	5,000	13,500	Contractual services	110411
		PM110701	Other admin. Costs (procurement, HR, or legal)	MiAmbiente (Ministry)	12,000	12,500	12,750	37,250	General operating and other costs	110701
PMC Total					44,500	45,750	44,750	135,000		
GRAND TOTAL					413,508	613,487	473,005	1,500,000		

COMPONENT 3									
	C3110101	Chief Technical Advisor	MiAmbiente (Ministry of Environment)	-	6.500	6.500	13.000	Staff & Personnel (Including Consultants)	110101
	C3110104	Senior Transparency Officer	MiAmbiente (Ministry of Environment)	-	4.950	4.050	9.000	Staff & Personnel (Including Consultants)	110104
	C3110702	Logistics and equipment for technical team	MiAmbiente (Ministry of Environment)	2.000	4.000	3.500	9.500	General operating and other costs	110702
	C3110112	Climate modelling and LTS Consultant	MiAmbiente (Ministry of Environment)	-	15.000	15.000	30.000	Staff & Personnel (Including Consultants)	110112
	C3110403	Climate Change policy consultancy	MiAmbiente (Ministry of Environment)	-	28.000	37.000	65.000	Contractual services	110403
	C3110103	National IT Expert	MiAmbiente (Ministry of Environment)	-	800	3.200	4.000	Staff & Personnel (Including Consultants)	110103
	C3110109	Legal Consultant	MiAmbiente (Ministry of Environment)	-	-	9.000	9.000	Staff & Personnel (Including Consultants)	110109
	C3110407	Capacity building and engagement workshops	MiAmbiente (Ministry of Environment)	-	5.000	5.000	10.000	Contractual services	110407
	C3110502	Materials for workshops	MiAmbiente (Ministry of Environment)	-	750	750	1.500	Supplies, Commodities & Materials	110502
	C3110201	International and national travel	MiAmbiente (Ministry of Environment)	-	3.000	3.000	6.000	Travel	110201
Component 3 Total				2.000	68.000	87.000	157.000		
MONITORING & EVALUATION (M&E)									
	ME110101	Chief Technical Advisor	MiAmbiente (Ministry of Environment)	3.500	3.000	3.000	9.500	Staff & Personnel (Including Consultants)	110101
	ME110301	Staff IT equipment	MiAmbiente (Ministry of Environment)	7.500	2.500	-	10.000	Equipment, Vehicles & Furniture	110301
	ME110408	Inception workshop	MiAmbiente (Ministry of Environment)	5.000	-	-	5.000	Contractual services	110408
	ME110409	Closure Workshop	MiAmbiente (Ministry of Environment)	-	-	5.000	5.000	Contractual services	110409
	ME110410	Translation services	MiAmbiente (Ministry of Environment)	1.485	1.530	1.485	4.500	Contractual services	110410
	ME110412	Mid Term and Terminal Evaluation	MiAmbiente (Ministry of Environment)	-	-	40.000	40.000	Contractual services	110412
M&E Total				17.485	7.030	49.485	74.000		
PROJECT MANAGEMENT COSTS (PMC)									
	PM110101	Chief Technical Advisor	MiAmbiente (Ministry of Environment)	7.500	7.500	6.000	21.000	Staff & Personnel (Including Consultants)	110101
	PM110102	Administrative assistant	MiAmbiente (Ministry of Environment)	18.000	18.000	18.000	54.000	Staff & Personnel (Including Consultants)	110102
	PM110501	Office supplies	MiAmbiente (Ministry of Environment)	3.000	3.000	3.000	9.000	Supplies, Commodities & Materials	110501
	PM110411	Independent financial audit	MiAmbiente (Ministry of Environment)	4.000	4.500	5.000	13.500	Contractual services	110411
	PM110701	Other admin. Costs (procurement, HR, or legal costs)	MiAmbiente (Ministry of Environment)	12.000	12.750	12.750	37.500	General operating and other costs	110701
PMC Total				44.500	45.750	44.750	135.000		
GRAND TOTAL				413.508	612.487	470.605	1.496.600		