



# **GEF-6 REQUEST FOR Climate Change ENABLING ACTIVITY PROPOSAL FOR FUNDING UNDER THE GEF Trust Fund**

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## **PART I: PROJECT IDENTIFIERS**

Project Title:	First Biennial Update Report and Third National Communication on Climate Change		
Country:	Guatemala	GEF Project ID: <sup>1</sup>	
GEF Agency:	UNDP	GEF Agency Project ID:	6120
Other Executing Partner:	Ministry of the Environment and Natural Resources (MARN)	Submission Date:	12 Jun 2017
GEF Focal Area:	Climate Change	Project Duration (Months)	36
Type of Report:	Biennial Update Report (BUR) National Communication (NC)	Expected Report Submission to Convention	3NC & 1BUR, Sep 2019

### **A. PROJECT FRAMEWORK\***

<b>Project Objective:</b> Assist Guatemala in the process of building the 3NC and 1BUR in compliance with its obligations under the United Nations Framework Convention on Climate Change (UNFCCC), in accordance with paragraph 105 of the Paris Decision and Article 13 of the Paris Agreement				
Project Component	Project Outcomes	Project Outputs	(in \$)	
			GEF Project Financing	Confirmed Co-financing <sup>2</sup>
1. National Circumstances, Institutional Arrangements, Constraints & Gaps, related financial, technical & capacity needs and other relevant information Publication and Submission, Monitoring and Evaluation	National circumstances and institutional arrangements relevant to the preparation of the 1BUR and 3NC in place  Constraints & Gaps, related financial, technical & capacity needs and other relevant Info  Publication and Submission,	1.1 Social, cultural, climatic, geographic, economic, and natural resources and environmental characteristics updated and analyzed. 1.2 National objectives for development, priorities, needs, and issues specifically related to climate change analyzed. 1.3 Institutional arrangements necessary for preparing the biennial reports and national communications defined. 1.4 Information about climate change, disaggregated by gender, is collected and analyzed.  1.5 Identify and propose solutions new constraints, gaps, technology, financial and capacity needs 1.6 Other information relevant for the preparation of 1BUR and 3NC consolidated  1.7. 1BUR and 3NC compiled, approved and submitted;	125,885	78,000

<sup>1</sup> Project ID number will be assigned by GEFSEC and to be entered by Agency in subsequent document submission.

<sup>2</sup> Co-financing for enabling activity is encouraged but not required.

	Monitoring and Evaluation	1.8. Project financial and progress reports prepared and submitted. 1.9. End of Project report and lessons learned compiled		
2. National GHG Emissions Inventory	Updated national GHG Inventory for key sectors and enhanced interinstitutional capacity to collect and update information	2.1. Agriculture, Forestry and Other Land Use (AFOLU) GHG Inventory developed for the years 2010, 2014 (TNC), and 2016 (BUR) with the 2006 Intergovernmental Panel on Climate Change (IPCC) guidelines 2.2. Emissions inventory maps from the Forestry and Other Land Use subsector for 2010, 2014 (TNC), and 2016 (BUR) developed in accordance with the 2006 Intergovernmental Panel on Climate Change (IPCC) guidelines 2.3. GHG emissions inventories (2010, 2014(TNC), and 2016(BUR)) for the Energy sector (including the transportation subsector), and the Industrial Processes, AFOLU, and Wastes sectors integrated 2.4. Arrangements for institutional management and trans-sector collaboration in developing the National Inventory of Greenhouse Gases - INVGEI (2010, 2014, and 2016) coordinated by MARN, strengthened to allow to continued collection of GHG information.	330,495	205,000
3. Vulnerability Assessment and Adaptation to Climate Change	Climate change vulnerability assessment for human health and economic impacts developed and recommendations for adaptation measures proposed	3.1. Report about the country's vulnerability in the areas of human health and water resources (with gender focus) developed. 3.2. Report on the country's vulnerability to climate change and its effect on the Gross Development Product (GDP) for the period 2010-2016 updated and available.	134,620	83,575
4. GHG Mitigation and domestic MRV system	Mitigation actions and their effects reported and monitored, and capacity to collect and analyze information on an ongoing basis for the future biennial update reports and national communications strengthened  Establishment of domestic	4.1 A system to collect, store, and manage information from projects and/or options for mitigation, adaptation, and vulnerability for the National Climate Change Information Management System (NCCIMS) in place. 4.2 Follow-up, implementation and compliance with Guatemala's NDC as the main contribution to the UNFCCC Paris Agreement.  4.3 The development process of national institutional arrangements	184,000	114,000

	Measurement, Reporting and Verification system supported	and framework for domestic MRV supported.		
Subtotal			775,000	480,575
Project Management Cost <sup>3</sup>			77,000	47,905
Direct Project Costs (DPC): 20,000				
<b>Total Project Cost</b>			<b>852,000</b>	<b>528,480</b>

\* List the \$ by project components. Please attach a detailed project budget table that supports all the project components in this table.

## B. SOURCE OF CO-FINANCING FOR THE PROJECT BY NAME AND BY TYPE

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount (\$)
National Government	Ministry of the Environment and Natural Resources (MARN)	Grant	155,403
National Government	Ministry of the Environment and Natural Resources (MARN)	In-kind	23,077
UNDP	UNDP: Integrating Agriculture into National Adaptation Plans (NAP-Ag)	Grant	250,000
UNDP	UNDP: Biodiversity Finance Initiative (BIOFIN) Initiative	Grant	100,000
<b>Total Co-financing</b>			<b>528,480</b>

## C. GEF FINANCING RESOURCES REQUESTED BY AGENCY, COUNTRY AND PROGRAMMING OF FUNDS

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	(in \$)		
					GEF Project Financing (a)	Agency Fee (b) <sup>b)</sup>	Total (c)=a+b
UNDP	GEFTF	GUATEMALA	CLIMATE CHANGE		852,000	80,940	932,940
<b>Total GEF Resources</b>					<b>852,000</b>	<b>80,940</b>	<b>932,940</b>

a) Refer to the Fee Policy for GEF Partner Agencies

<sup>3</sup> This is the cost associated with the unit executing the project on the ground and could be financed out of trust fund or co-financing sources. For EAs within the ceiling, PMC could be up to 10% of the Subtotal GEF Project Financing.

## **PART II: ENABLING ACTIVITY JUSTIFICATION**

<b>A. ENABLING ACTIVITY BACKGROUND AND CONTEXT</b> (Provide brief information about projects implemented since a country became party to the convention and results achieved):	<p>Guatemala ratified the United Nations Framework Convention on Climate Change (UNFCCC) agreement in 1995 and the Kyoto Protocol in 1999. With regard to the commitments agreed to before the UNFCCC, the Government of Guatemala (GoG) has been guided by the directives of the Non-Annex I Parties adopted in Decision 17/CP.8. As such, the GoG presented the First National Communication (INC) on February 1, 2002, the Second National Communication (2NC) on January 11, 2016, and its Intended Nationally Determined Contribution (INDC) on September 30, 2015.</p> <p>The GoG is preparing to develop the Third National Communication (3NC) and the First Biennial Update Report (1BUR) under the UNFCCC. In the context of the previous NCs, the GoG prepared four National Inventory of Greenhouse Gases (INVGEI), covering the period of 1990 to 2005 (1990, 1994, 2000, and 2005) and using the 1996 IPCC Guidelines for National Greenhouse Gas Inventories. These inventories have been performed in the Energy, Industrial Processes, Agricultural, Forestry, Other Land Use and Wastes sectors, which have allowed for the generation of information about the status of the country with regard to climate change. This has led to a better understanding of climate change by government officials, policy formulators, the private sector, civil society, academia, decision makers, and the general population. The principal goal of the INC (2001) was for the GoG to obtain the appropriate information and a comprehensive view of the status of greenhouse gas (GHG) emissions, which helped guide the development of laws, policies, plans, programs, and projects. The principal goal of the 2NC (2015) was for the GoG to systematize the progress towards developing an INVGEI and to consolidate support from the government and other sectors of Guatemalan society in response to climate change with regard to adaptation, mitigation, providing information to the fourth INVGEI, actions developed for adaptation and mitigation, and a gap and needs analysis related to financing, technology, and capacity to address climate change, as well as the development of technical capacities to develop future NCs.</p> <p>Guatemala contributed 0.04 percent emissions, 14,742 Gigagrams of CO<sub>2</sub> equivalent (Gg CO<sub>2</sub>-eq), in 1990. In the proposal that Guatemala submitted to the UNFCCC with regard to INDC, in accordance with the principal of Common but Differentiated Responsibilities and Respective Capabilities (CBDR- RC), the GoG proposes to achieve an unconditional reduction of 11.2% of its total GHG emissions from the baseline year of 2005 to 2030 (this goal is proposed solely considering national financial investments). This 11.2% reduction implies that the emissions, under a Business as Usual (BAU) scenario of 53.85 million tons of CO<sub>2</sub>-eq estimated for 2030, will be reduced to 47.81 million tons of CO<sub>2</sub>-eq in that year. Guatemala has set a more ambitious reduction than this, at up to 22.6% of its total GHG emissions from the baseline year of 2005 to 2030 (as a condition of achieving this goal, it will be necessary to have technical and financial support from public and private international resources, both new and additional). This 22.6% reduction implies that the emissions, at a BAU of 53.85 million tons of CO<sub>2</sub>-eq for 2030, would be reduced to 41.66 million tons of CO<sub>2</sub>-eq that year.</p> <p>The energy sector in Guatemala has made significant progress towards diversifying the energy matrix and prioritizing the generation of renewable energy. As of 2014, the ratio of renewable energy production to non-renewable energy production was 70% to 30%. In 2015, it was estimated that 64% of the population used firewood to cook food and heat homes. In 2012, the demand for firewood was 27.98 million m<sup>3</sup>, making the capacity of the forests to supply this demand in the future unsustainable. To reverse this situation, the National Strategy for Sustainable Production and Efficient Use of Firewood 2013-2024 was developed, which proposes to establish at least 48,000 hectares of plantations and agroforestry systems with support from forest incentive</p>
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programs (Incentive Program for the Establishment, Recovery, Restoration, Management, Production, and Protection of Forests [PROBOSQUE] and Incentive Program for Small Holders of Land Suitable for Forestry or Agroforestry [PINPEP]). This strategy will produce approximately 1.2 million m<sup>3</sup> of firewood each year and implement at least 650,000 energy-efficient firewood stoves by 2023.

In the agricultural sector, Guatemala has two main activities that are important sources of emissions: cattle enteric fermentation (139,041 CH<sub>4</sub> [in Gg], year 2005) and manure management (5,190 CH<sub>4</sub> and 0.715 N<sub>2</sub>O [in Gg]), year 2005) and the use of nitrogen fertilizers. To reverse this situation, the Ministry of Agriculture, Livestock, and Food (MAGA) has begun a process to promote small family biodigesters and the use of organic fertilizers.

Changes in land use, particularly the conversion of forests and grasslands, are expected to remain as one of the three major categories of GHG emissions. In order to reduce associated emissions, Guatemala has developed several initiatives to reduce deforestation and degradation and to improve carbon stocks, including the Forest Incentives Program (PINFOR) and PINPEP. These programs led to the sequestering of 9,570,841 tCO<sub>2</sub> between 2001 and 2010. Guatemala also adhered to the World Bank proposal (through the Forest Carbon Partnership Facility [FCPF]) to establish the National Strategy for Reduced Emissions through Avoided Deforestation and Forest Degradation in Guatemala (REDD+), which reduces net GHG emissions.

It is estimated that only 25% of solid waste is disposed of in sanitary landfills and controlled landfills, while the rest are disposed off in open-air dumpsites or burned. Eighty-eight percent of the sites used for final disposal of solid waste are not authorized or are illegal dumpsites; in 2005, CH<sub>4</sub> emissions were estimated at 49,599 Gg and N<sub>2</sub>O emissions at 0.616 Gg. To counter this situation, the MARN presented to the Council of the Fund for Nationally Appropriate Mitigation Actions (NAMAs) the project “Reduction of GHG emissions and their compensation through the integration of the mitigation component in the integrated waste and solid waste management in the Amatitlán, Izabal, and Petén Itzá lakes”, to be implemented between 2016 and 2020. Private initiatives to reduce energy generation and emissions have also been developed; in 2014 the Biogas Project of the El Trébol Landfill was approved for the municipal dump of Zone 3 of Guatemala City, which is the largest in the country and receives 1,044.2 tons/day of household waste (from 10 municipalities and a population of 1.92 million). This project has the capacity to generate 4.8 megawatts and has an estimated average annual reduction of 141,597 tCO<sub>2</sub>-eq of methane emissions. In addition, through the National Interconnected System (NIS), it will support the diversification of the energy matrix with renewable energy production. Regarding management of industrial waters, there are five projects to manage wastewater from the African palm oil and sugar cane alcohol industries. In total, these projects will allow the reduction of approximately 246,000 tCO<sub>2</sub>-eq annually.

Since 2011, Guatemala has been mobilizing external resources for climate adaptation and resilience actions; at the end of 2015, Guatemala received approximately \$34,521,546 USD. The majority of the funds have come for programs and projects, including:

1. The Inter-American Development Bank (IADB)-funded project *Program to Support the National Climate Change Agenda*, which has as its main purpose to develop a series of initiatives that allow for the strengthening of climate change activities in the country, including institutional strengthening at different levels of the government, climate change mitigation with the programming of energy efficiency activities, and adaptation in priority sectors.
2. The German Agency for International Cooperation (GIZ)-funded project *Rural Development and Adaptation to Climate Change* (ADAPTATE), which supports national ministries,

	<p>regional administrations, the private sector, and civil society organizations in the implementation of measures for adaptation to climate change and environmental management.</p> <ol style="list-style-type: none"> <li>3. Structural Reforms for the Construction of the National Climate Change Adaptation and Mitigation Plan. The Plan provides the guidelines for public institutions and the different sectors of the country to implement actions focused on the fulfillment of the objectives and results embodied in the Framework Law to Regulate the Reduction of Vulnerability, Compulsory Adaptation to the Effects of Climate Change and Mitigation of Greenhouse Gases (i.e., Climate Change Law).</li> <li>4. The Interinstitutional Strategic Agenda (MARN-SECONRED-National Protected Areas Council [CONAP]) with support from the Partners for Resilience (PfR; Phases I and II), whose goals are the articulation of public policy and its strategies; interagency capacity building; and the reduction of social, economic, environmental, political, and educational vulnerabilities of local communities.</li> <li>5. The Adaptation Fund project <i>Climate change Resilient Productive Landscapes and Socio-Economic Networks Advanced in Guatemala</i>, which aims to increase climate resilience of production landscapes and socioeconomic systems in the target municipalities threatened by the impacts of climate change and climatic variability, in particular hydrometeorological events that are increasing in frequency and intensity.</li> <li>6. The Global Environment Facility project (GEF ID 4479) <i>Sustainable Forest Management and Multiple Global Environmental Benefits</i>, which will strengthen land/forest management processes and biodiversity conservation in order to secure the flow of multiple ecosystems services while ensuring ecosystem resilience to climate change, including improving carbon stocks and reducing GHG emission in two forested landscapes.</li> <li>7. The Global Environment Facility project (GEF ID 4716) <i>Conservation and Sustainable Use of Biodiversity in Coastal and Marine Protected Areas (MPAs)</i> will promote the conservation and long-term sustainable use of marine-coastal biodiversity of global importance through effectively and equitably managed marine-coastal protected areas (MPAs), including the implementation of strategies for reducing vulnerability and the impacts of climate change to biodiversity and ecosystem services in MPAs and their buffer areas.</li> <li>8. The United Nations Development Program (UNDP) <i>Biodiversity Finance Initiative (BIOFIN)</i>, which promotes changes in the way biodiversity and environmental services are addressed through financial planning and political decisions in both the public and private sectors.</li> <li>9. Support to the MARN in developing and implementing a low-GHG-emissions development strategy within Guatemala, including the Preparation of the National REDD+ Strategy, which seeks to reduce GHG emissions in the forestry sector with the participation of local communities and indigenous peoples.</li> </ol> <p>These initiatives have contributed towards achieving the preparation, follow-up, strengthening, and monitoring of the national climate change agenda and actions for planning and implementation in the themes of vulnerability, adaptation, and mitigation, thereby contributing to reducing the impacts of climate change in the country and reduced GHG emissions.</p> <p>In compliance with the UNFCCC and the commitments of presenting the NCs every 4 years and the BURs every 2 years, the GEF financing is necessary. Because of the lack of financing, the GoG has not been able to provide adequate support to the process of delivering the NCs, to the extent that the 1NC was delivered in 2001 and the 2NC in 2015 (14 years later). This represents a significant delay. In addition, it has not complied with the delivery of the BURs. This initiative seeks to strengthen and contribute to institutionalizing the process for developing the 3NC and the 1BUR. This implies the following: a) Strengthen the national capacities for developing</p>
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	<p>institutional agreements and the governing platform for climate change among the Interinstitutional Coordination Group (GCI), the Interinstitutional Group for Monitoring Forests and Land Use (GIMBUT), both of which are conformed by the MARN, MAGA, CONAP, and the National Forest Institute (INAB), civil society groups, and international cooperation agencies (GIZ, IADB, the U.S. Agency for International Development [USAID], and UNDP; b) Create and systematize information (mainly to maintain and periodically update the GHG inventories), and consolidate human and technological resources and technology tools; c) Consolidate the Monitoring, Reporting, and Verification (MRV) system; and d) Develop studies that allow for the reduction of information gaps and support international conventions. The 3NC and the 1BUR will enable the country to make decisions related to policy, regulations, and implementation of programs and projects that will help to improve, in the medium term, its capacity to reduce its impact on global climate change.</p> <p>The 3NC and 1BUR are expected to be finalized and submitted to the UNFCCC Secretariat by September 2019.</p>
<p><b>B. ENABLING ACTIVITY GOALS, OBJECTIVES, AND ACTIVITIES</b> (The proposal should briefly justify and describe the project framework. Identify also key stakeholders involved in the project including the private sector, civil society organizations, local and indigenous communities, and their respective roles, as applicable. Describe also how the gender equality and women's empowerment are considered in project design and implementation):</p>	<p>The objective of the project is to assist Guatemala in the process of building the 3NC and 1BUR in compliance with its obligations under the UNFCCC.</p> <p>This initiative is aligned with the GEF-6 Climate Change Mitigation Focal Area Strategy and in accordance with Objective CC3 to “Foster enabling conditions to mainstream mitigation concerns into sustainable development strategies.” Along these lines, particular attention is given to Program 5 of this objective, which is to “integrate findings of Convention obligations enabling activities into national planning processes and mitigation contributions.” This will facilitate compliance with the commitments to the UNFCCC, principally those related to Articles 4 and 5 of the Convention and the directives of the Non-Annex I Parts of the UNFCCC that were adopted through Decision 17/CP.8.</p> <p>The project's outcomes will contribute towards generating information, creating and consolidating the conditions for systematizing the NCs and BURs, which will allow the incorporation of actions in compliance with the 2030 Sustainable Development Objectives (SDGs), the goals of the Government General Policy 2016—2020, the national goals related to Climate Change 2030, and the goals of the Global Climate Change Agenda. The project is also aligned with Outcome 3.1 of the of the United Nations Development Assistance Framework (UNDAF) for Guatemala: The policies indicated are already in process, as well as the pertinent legislation, which is currently being implemented, in order to appropriately guide the aspects related to the environment, energy, climate change, and resiliency to disasters that are a result of natural and human causes.</p> <p>At the national level, the entity responsible for coordinating initiatives related to Climate Change is the National Council on Climate Change (NCCC), with the MARN acting as secretary with support from the Secretariat for Planning and Programming of the Presidency (SEGEPLAN). Within the government, the MARN is responsible for aspects surrounding climate change, which include monitoring the commitments made before the UNFCCC and preparation of the NCs. Specifically, a Technical Advisory Committee (TAC) is proposed for developing the NCs. The TAC will be composed of a team of technical specialists from the MARN and representatives from roundtables (one from each of the sectors: Energy, Industrial Processes, Agriculture, Forestry, and Other Land Uses and Wastes). Representatives from government institutions, the private sector, academia, non-governmental organizations (NGOs), civil society, and international cooperation agencies will participate in the TAC.</p> <p>Guatemala has presented two NCs (2001 and 2015), has completed four INVGEI, and is currently seeking GEF support in financing preparation of the 3NC and 1BUR. Fourteen years have passed between the first and second NCs, which is due to the following reasons: a) weak governance and institutional agreements; b) limited technical capacities to develop the NCs; c) limited amount and</p>

quality of information to develop the INVGEI; d) limited information related to vulnerability, adaptation, and mitigation; and e) lack of support and agreement between the key sectors, primarily the private, agricultural, and forestry sectors. As such, this initiative will facilitate actions to reduce these limitations through the following: a) strengthen governance and technical support with appropriate follow-up to draft the 3NC and 1BUR; b) provide support for generating information for the INVGEI (primarily Agriculture, Forestry and Other Land Use – AFOLU, and Energy); c) integrate the information from the Energy, Industrial Products, and Wastes inventories; d) facilitate studies on vulnerability, adaptation, and mitigation; and e) facilitate “coordination” and strengthen national actions from the public sector (government institutions), private sector, NGOs, municipalities, civil society, and projects that carry out activities that help to generate information; such as the USAID/Low-Emissions Development Project (financed by USAID), REDD+/MARN Project (financed through the FCPF and implemented by the IADB), and the Climate, Nature, and Communities in Guatemala Program (CNCG), which is financed through USAID.

The outcomes of the 3NC/1BUR will benefit the Guatemalan people by making more information about climate change available to the public, and by reviewing strategies and actions proposed in the National Action Plan for Climate Change Adaptation and Mitigation (NAPCCAM). These actions and strategies will be implemented locally, thereby ensuring the mechanisms for MRV and progress towards a decreased contribution of emissions and increased resilience to climate change. This will also facilitate a review of the policies and regulations related to climate change.

The Guatemalan population is expected to benefit from these actions as follows:

- a) Greater availability of information and expanded knowledge about climate change and its negative effects;
- b) Identification and assessment of adaptation measures;
- c) Assignment of roles and activities to the different sectors (public and private, NGOs, universities, etc.) regarding climate change mitigation and adaptation;
- d) Evaluation of the opportunities to contribute to national sustainable development through the implementation of GHG emission mitigation project.
- e) Greater participation, contribution, representation (at different levels and in different forums), inclusion in opportunities, financing, capacity-building, development (of policies, strategies, plans, and documents) and negotiation, with gender equity.
- f) Systematizing and operationalizing the process to develop the NCs and BURs.

#### **Stakeholder involvement**

A group of stakeholders comprised by government institutions (Ministries, Secretariats, Boards, etc.), local communities, local officials, NGOs, the media, research institutions, the private sector, and international organizations will be actively participating in the implementation of the project. The group’s participation in the planning, monitoring, and evaluation of the project is essential for achieving its objective. The project proposes to strengthen the participation of interested parties and facilitate their integration into this process to address climate change and its challenges in Guatemala. As such, the MARN convened a series of stakeholders’ consultations including Guatemalan System of Climate Change Sciences (GSCCS), IADB, the Rainforest Alliance, and the Low-emission Development Project/USAID, who participated in guiding the development process with their knowledge of climate change. To ensure the participation of stakeholders, this project proposes the creation of a TAC comprised of government institutions, organizations, NGOs, and the private sector who will provide input and information and who will guide the execution of the project and contribute to the implementation, monitoring, and evaluation processes.



Among these stakeholders, the following government ministries have been identified: MARN, MAGA, Ministry of Social Development (MIDES), Ministry of Education (MINEDUC), the Ministry of Public Health and Social Welfare (MSPAS), Ministry of Energy and Mines (MEM), Ministry of National Defense (MINDEF); other stakeholders to be involved in the project include the National Coordination for Disaster Reduction (CONRED), INAB, National Statistics Institute (INE), Institute of Seismology, Vulcanology, Meteorology, and Hydrology (INSIVUMEH), SEGEPLAN, and Secretariat of Food Security and Nutrition (SESAN); the private sector; NGOs; civil society organizations; and international cooperation agencies.

Stakeholder	Role in the Project
MARN	Provide technical guidance for the coordination, planning, and development of the 3NC and 1BUR. Responsible for the implementation of the project and for maintaining continued communication with project partners and the GEF
CONRED	Provide information about territories and vulnerable populations, as well as knowledge and experience in adaptation measures.
CONAP	Provide information relevant to determine the vulnerability of protected areas to climate change.
INAB	Provide technical guidelines so that the project's actions are in line with forestry policy, the institution's programs, and harmonization with the initiatives underway with regard to climate change.
INE	Provide the information, analyses for the INVGEI, and facilitate the inclusion information related to the AFOLU in future National Agricultural Surveys (NAS) that will contribute to future GHG inventories.
INSIVUMEH	Provide climate and hydrological information for analysis of the vulnerability of the population and water resources to climate change.
MAGA	Provide relevant information and coordination with institutions, organizations and the private sector, including AFOLU-related information to develop the INVGEI (2010, 2014, and 2016).
SEGEPLAN	Guide the institutions involved in the project so that the project's actions are harmonized with the related public policies.
MSPAS	Provide information relevant to determine the vulnerability of the population to climate change, principally in relation to health problems.
MEM	Provide information related to GHG emissions; provide data to perform calculations for the Energy and Industrial Processes sectors for the 2010, 2014, and 2016 INVGEI, as well as adaptation and mitigation measures currently in progress.
MINEDUC	Provide information related to how national education focuses on climate change and vulnerability, adaptation, and mitigation aspects, and what actions are developed to promote adaptation to climate change.
MIDES	Provide information and experiences related to participatory social development
MINDEF	Provide information related to vulnerable geographic areas and communities and adaptation and mitigation actions carried out for these communities.
Private sector	Provide information about GHG emissions as well as climate change adaptation and mitigation actions to construct the INVGEI (2010, 2014, and 2016).
SESAN	Provide information about vulnerable areas and communities, as well as its knowledge and experience in adaptation actions.
UNDP	Provide guidance, institutional support, and technical/administrative assistance, as well as theoretical and practical knowledge for effective project implementation.

#### Gender dimension

The [guidance on gender integration through the NCs and BURs](#) developed by the Global Support Programme through UNDP and in collaboration with UNEP and GEF, will be applied.

	<p>According to the project objective and the proposed actions, it is categorized as “Gender Responsive” according to UNDP’s gender results effectiveness scale: i.e., results addressed differential needs of men or women and equitable distribution of benefits, resources, status and rights but do not address root causes of inequalities in their lives.</p> <p>The project will ensure that the 3NC and 1BUR present accurate gender-based statistical data and allow the participation of women and girls and indigenous communities in addressing the threat of climate change to these communities. Gender aspects and affirmative actions will be considered ensuring social inclusion and gender equality, and addressing the specific challenges of climate change that affect women and men differently.</p> <p>Project-related assessments at the national and sub-national levels will document experiences where climate change mitigation and adaptation initiatives have considered gender and the role of women, including access and use of water, food security, REDD+, energy efficient firewood stoves, use of biodigesters, use of biological diversity, conservation and promotion of ancestral knowledge among women, and use of renewable energy technologies, among others.</p> <p>In addition, the project coordination will ensure that gender considerations become an integral part of the 3NC and 1BUR. The project will consider UNDP’s Gender Equality Strategy and will make of related available tools. The Strategy requires, for example, a brief analysis of how the project will achieve its environmental objective, addressing the different roles and needs of women and men. The project will pay special attention to women and women groups as one of the principal interest parties and as beneficiaries of adaptation, mitigation, and the transfer of technology related to climate change.</p> <p>The project will improve understanding about how to integrate gender considerations into the different activities related to climate change mitigation and adaptation into agriculture, health, forestry, solid waste management, energy, forestry, etc.</p> <p>Gender equality will also be reflected in the Working Roundtables that will be established for developing and strengthening capacities to develop the INVGEI, as well as with other working groups and consultations that are developed during the process. The project will promote greater participation and representation in the different levels and platforms to promote equal opportunities and training, as well in the processes to develop strategies, plans, and documents reflecting international commitments.</p> <p>Gender equality will be promoted in meetings, workshops, and other events. Gender equality will also be expected within the technical team that is to be hired to support the project. The project will also prioritize hiring men and women consultants. To ensure that gender aspects are considered in the project, the UNDP/ATLAS Gender Marker methodology will be used in the development of the 3NC and 1BUR project ensuring that the project meets the score of least 1 (outputs will contribute in some way to gender equality).</p>
<p><b>C. DESCRIBE THE ENABLING ACTIVITY AND INSTITUTIONAL FRAMEWORK FOR PROJECT IMPLEMENTATION</b> (discuss the work intended to be undertaken and the output expected from</p>	<p><b>Institutional framework</b></p> <p>The Government of Guatemala will implement this three-year project with the support of UNDP (as GEF Implementing Agency) under the National Implementation Modality (NIM). The MARN, as the regulatory body responsible for implementing the country's environmental policy, will serve as the Executing Agency/Implementing Partner. The MARN will be responsible for delivering project outcomes and will be responsible for ensuring that the project objective and outcomes are successfully delivered, and that resources are allocated and disbursed as indicated in the Project Document. Similarly, the MARN will ensure effective coordination between this project and other relevant programs and projects in Guatemala.</p> <p>Implementation of the project will be carried out under the general guidance of a Project Board, specifically formed for this purpose. The main responsibilities of the Project Board are: a) approve</p>

<p>each activity as outlined in Table A).</p>	<p>the project work plan; b) make decisions regarding the milestones defined in the Annual Operational Plan; c) monitor project development; ensure that activities are contextualized in the strategies and objectives of the Project; d) approve budget and substantial project revisions and address issues relating to the Project Manager's report; and e) approve the project plans and technical reports and financial progress. The Project Board will be composed by the MARN, who will assume the role of Executive Agency and UNDP, who will assume the role of Senior Supplier. The Project Board shall meet regularly every six months and in extraordinary sessions when convened by the Executive Agency. The UNDP will assign a Program Officer to support the Project Board in overseeing and monitoring the project in an objective and independent way (i.e., Project Assurance).</p> <p>The project execution team will consist of a Project Coordinator and a Technical Administrative Assistant. The Project Coordinator will be appointed by the MARN and will act as administration executive director of the project activities. The Project Coordinator's prime responsibility is to ensure that the project delivers the project's outputs outlined in Table A. The Project Coordinator will be based in the Projects Unit at the headquarters of the MARN. The Project Coordinator and the Technical Administrative Assistant will be contracted with GEF funds for the entire duration of the project based on annual performance evaluations.</p> <p>A Technical Advisory Committee (TAC) for National Communications will be formed, and will be responsible for developing the 3NC and 1BUR. The TAC will be made up of assigned members and whose composition, responsibilities, and functions will be determined directly by local stakeholders. The TAC will also include institutions and stakeholders defined by the Project Board, including the MARN and representatives of the sectorial panels of the National Low Emissions Development Strategy. The responsibilities of the TAC are: a) Support the formulation of 3NC and 1BUR; b) Support and advise the implementation team of the 3NC and 1BUR Project; and c) Facilitate and coordinate actions with other related stakeholders for the preparation of 3NC and 1BUR.</p> <p>The TAC will meet periodically to evaluate the progress of the project and communicate the interests and concerns to the Project Coordinator, subject to confirmation during project inception. The TAC will propose the creation of the Technical Working Groups, one for each of the sectors defined for the elaboration of the INVGEI, being these: Energy, Industrial Processes, AFOLU, and Wastes. The Technical Working Groups will be made up of government institutions, the private sector, local governments, civil society, NGOs, and international cooperation agencies.</p> <p>The Technical Working Groups will allow analyzing, discussing, and proposing specific actions for each INVGEI by sector, so that the generation of information, the formulation of inventories and the reports, will appropriately reflect the particular situation of each sector, and will serve as inputs for adaptation and mitigation measures to be adopted considering gender equity.</p> <p>Implementation of Project Components: According to the components defined for the 3NC and 1BUR Project (a total of four) and the implementation agreements established by MARN and UNDP, the Project will be executed as follows:</p> <ul style="list-style-type: none"> <li>• The MARN will implement: Component/Outcome 2, National GHG Emissions Inventory; and Component/Outcome 3, Vulnerability and the effects of Climate Change and Climate Change Adaptation and Component/Outcome 4, GHG mitigation and domestic MRV system.</li> </ul>
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- UNDP will implement: 1) Component/Outcome 1, National Circumstances, and all aspects related to project monitoring and evaluation; **Activities for Project Implementation**

Component 1. National Circumstances, Institutional Arrangements, Constraints & Gaps, related financial, technical & capacity needs and Other relevant Information:

Information about the national circumstances will be gathered and updated, taking into consideration the results of investigations, studies, national surveys, and registries, principally with the sectors related to GHG emissions (Energy, Industrial Products, Agriculture, Forestry, and other Land Uses and Wastes). This information about national circumstances is critical to understanding the country's vulnerability, its capacity, and its options to adapt to the negative effects of climate change, as well as its options to manage GHG emissions within the wider context of sustainable development.

To appropriately develop this component, the TAC will facilitate the coordination and consultation with the other government institutions that generate information (registries, studies, statistics) such as the INE, MSPAS, MIDES, MINEDUC), CONRED, SESAN, INSIVUMEH, SEGEPLAN, as well as the private sector, universities, and research centers. A description of the outputs of this component follows.

*1.1. Social, cultural, climatic, geographic, economic, and natural resources and environmental characteristics updated and analyzed.*

This output presents updated information about national circumstances with an appropriate and expansive description of each issue, so that the current national situation in Guatemala with respect to each topic can be clearly understood.

Specific activities include:

- Compile and analyze information about national circumstances, taking into account the results of investigations, studies, national surveys, and registries, principally with the sectors related to GHG emissions (Energy, Industrial Products, Agriculture, Forestry, and Other Land Use and Wastes).
- Develop the appropriate description of the topics developed in the Third Communication on Climate Change document.

*1.2. National objectives for development, priorities, needs, and issues specifically related to climate change analyzed.*

This output delivers an analysis of the national development objectives related to climate change, in order to determine the progress made and gaps identified with regard to these obligations and the actions to be developed to comply with these.

Specific activities include:

- Develop an analysis of the context in which the specific issues related to climate change are being developed, within these the progress made with regard to international agreements, compliance with established commitments, and compliance with national policies on climate change.
- Determine the actions and a work plan, as well as a schedule for complying with or complementing those aspects that have not been carried out with regard to the national and international commitments around climate change.
- Periodically develop an analysis and evaluation of the progress made and compliance with the issues specifically related to climate change.

*1.3. Institutional arrangements necessary for preparing the biennial reports and national communications defined.*

The coordination, communication, and necessary actions to be taken among the central government, organizations, the private sector, and other interest groups to develop the 3NC and 1BUR will be defined through this output.

Specific activities include:

- Conduct coordination meetings with the government, organizations, private sector, and other interest groups
- Define a work plan and a program for the delivery of the 3NC and 1BUR.

*1.4. Information about climate change, disaggregated by gender, is collected and analyzed.*

The project will facilitate performing a study on the issue of gender, placing special attention on collecting and analyzing information about indigenous groups, groups living in poverty and extreme poverty, rural groups, and groups living in areas that are the most vulnerable to climate change.

Specific activities include:

- Coordinate through the MARN the necessary actions with the interested parties to determine the focus of the study to be developed to obtain the proposed output. Facilitate actions to carry out the study to obtain the necessary information.
- Process, tabulate, and systematize the national information obtained, analyze this information, and create the report.
- Present and communicate the results obtained to the interested parties.

The information on the national circumstances should be clearly related to the information provided in other chapters of the national communications; consequently, all of the sections and aspects should be in agreement with the national situation and the development priorities. The information presented in the national circumstances should be in line with the current regulatory and legal framework. The information obtained will be important for decision-making, formulating policies, programs and projects, and for the actions proposed with regard to vulnerability, adaptation, and mitigation. The project should observe the directives on developing the national communications and biennial reports.

During the first quarter of the first year of the project, four consultation workshops will be held to develop the 3NC and the 1BUR. These workshops will be held in four regions around the country: 1) the Central Region, Guatemala City; 2) the Western Highlands; 3) the Northern Region, Las Verapaces; and 4) the Northern Region, Petén. The development of the 3NC and the 1BUR will be done simultaneously to avoid duplication of efforts and to achieve the efficient management of project activities and resources, as well as the necessary capacity building to meet the enhanced reporting requirements for NCs and BURs. Similarly, during the last year of the project, four workshops for the socialization and presentation of the 3NC and the 1BUR will be held in the same regions.

*1.5 Identify and propose solutions to the constraints, gaps, technology, financial and capacity needs*

This output will allow identifying and proposing solutions to constrain and gaps, as well as technology, financial and capacity building needs.

Specific activities include:

- Conduct through the MARN a study of financial, technological and capacity needs and constraints of institutions responsible for activities related to climate change through the collection, synthesis and analysis of existing information, individual interviews or group discussions, site visits, among others.
- Receive, document, and present information on financial resources, technology transfer, capacity building and receive technical support from bilateral and multilateral donors, IFIs, etc. for activities related to climate change.
- Present information on national resources allocated for climate change upon ratification of the UNFCCC in order to show national efforts on the combat against climate change.

#### *1.6 Other information relevant for the preparation of 1BUR and 3NC consolidated*

Relevant to the achievement of the objectives of the UNFCCC, the insufficiency of financial and technological resources and absence of systematic approach are considered as the main barriers to strengthen capacity and ensure sustainability of implementation of various programs related to climate change. Therefore, in line with the Doha Work Program, activities related to provisions under Article 6 of the UNFCCC, as well as needs assessment for systematic observation and climate change research and technology needs assessment for various sectors in relation to mitigation and adaptation are among priority areas.

Specific activities include:

- Assess all awareness raising, education, and research on climate change that has been carried out within different programs and projects, including donor-funded interventions, which will be made available through a national knowledge platform.
- Conduct at least one public awareness campaign on climate change at the national level.
- Conduct training on climate change negotiations for young professionals who are engaged in climate change issues.
- Conduct a study about the different gender roles in adaptation and mitigation interventions at the community level, policy formulation, and decision-making processes.
- Compile the section on other information relevant for 3NC and 1BUR incorporation.

#### *1.7. 1BUR and 3NC compiled, approved, and submitted*

The MARN will take into account the commitments made before the UNFCCC, considering all procedures and guidelines to achieve compliance with the delivery of the 3CN and the 1BUR. To achieve this, the MARN will maintain continuous communication and make the relevant consultations before the UNFCCC and will submit the 3CN and 1BUR in accordance with these commitments and with the quality required. In addition, the compilation and approval process of the 3NC and 1BUR will follow a close consultation with national stakeholders. Once finalized, both documents will be translated, edited, and submitted to the UNFCCC Secretariat for posting and dissemination. The 3NC and 1BUR are expected to be submitted in September 2019.

Specific activities include:

- Compile the 1BUR and 3NC and verify that all of the information necessary for an adequate description of the country situation is included.
- Present the 1BUR and 3NC to the national stakeholders and Project Board for approval.
- Translate, edit, and submit the 1BUR and 3NC to the UNFCCC Secretariat.

#### *1.8. Project financial and progress reports prepared and submitted*

The Project will implement actions and procedures to allow all information to be compiled, made available, and periodically generate reports of technical and financial progress in accordance with GEF and UNDP reporting requirements.

Specific activities include:

- Prepare and submit a project inception workshop report, including a summary of financial reporting procedures and mandatory requirements, and agree on the arrangements for the annual audit.
- Prepare and submit financial quarterly reports.
- Prepare Status Survey Questionnaires twice a year to indicate technical project progress.

#### *1.9. End of Project report and lessons learned compiled*

A comprehensive report will be prepared, which summarizes all activities, achievements, and outputs of the project, lessons learned, objectives met or not achieved, structures and systems implemented, etc.; and will be the definitive statement of the project's activities during its lifetime. It will also lay out recommendations for future projects.

Specific activities include:

- Compile and document lessons learned and recommendations for future projects.
- Approve and submit the end-of -project report.

#### Component 2. National GHG Emissions Inventory:

Guatemala has developed four INVGEI (1990, 1994, 2000, and 2005) using the 1996 IPCC Guidelines for National Greenhouse Gas Inventories. As such, this initiative will support the preparation of the fifth, sixth, and seventh INVGEI (using data from 2010, 2014 (TNC), and 2016 (BUR), respectively). The 3NC/BUR will include information from the 2010, 2014, and 2016 INVGEI for the principal sources of GHG emissions: 1. Energy; 2. Industrial Processes; 3. AFOLU; and 4. Wastes; and taking into consideration information for 7 GHG, including: CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, and indirect GHG (for example, NO<sub>x</sub> CO, non-methane volatile organic compounds [NMVOC], and SO<sub>2</sub>). The 3NC will present an analysis of the results from the four previous INVGEI (1990, 1994, 2000, and 2005) as well as of the evolution and results with regard to the fifth, sixth, and seventh INVGEI, integrating the information and focusing on those aspects that are most relevant.

To develop the fifth, sixth, and seventh INVGEI, Guatemala has various supporting projects that are collaborating closely with the MARN to gather data, develop, calculate, and present the results. The USAID/Low-emissions Development Project is helping to establish the protocols for the four defined sectors: 1. Energy, 2. Industrial Processes, 3. AFOLU, and 4. Wastes, which will enable the gathering of information for the fifth, sixth, and seventh INVGEI. In addition, the project will help to gather information on the Energy, Industrial Processes, and Waste sectors using the methodology proposed by the Intergovernmental Panel on Climate Change (IPCC) in 2006 for the 2010, 2014, and 2016 INVGEI. The aim of the methodology is to systematize the process for data gathering, calculation, and presentation of results for future INVGEI. The project will also contribute through the following studies: a) Develop a proposal for an abatement curve of the agriculture sector, wastes, and industrial processes to determine the most feasible and profitable sectorial economic activity and its contribution to Guatemala's INDC, and b) Perform a sectorial analysis and financial calculation of the mitigation processes for Guatemala's INDC.

The MARN REDD+ project and the CNCG project, in coordination with the GIMBUT, are contributing to the construction of the baseline reference levels for REDD+. This includes the methods and data for the calculation of forest cover, forest degradation through forest fires,

firewood consumption, and illegal logging, as well as the estimation of the increase in carbon stocks through reforestation, information that will be relevant for building the INVGEI for AFOLU. In addition, the IADB/Nationally Appropriate Mitigation Actions (NAMA)/Firewood project will coordinate efforts to promote the development of the Energy sector (Firewood subsector) INVGEI.

This proposal for the development of the 3NC and 1BUR will add to the efforts by the MARN to fill those gaps identified for developing the GHG inventories, whereby the GEF funds will be used to achieving the following outputs:

*2.1. AFOLU Inventory developed for the years 2010, 2014, and 2016 in accordance with the 2006 IPCC guidelines.*

The project will support the preparation of information for the 3NC for the agriculture subsector as well as the Forestry and Other Land Use subsector with data from 2010, 2014 (TNC); and for the 1BUR, with data from the year 2016 and using the 2006 IPCC Guidelines for National Greenhouse Gas Inventories. Through this output information needed to build the INVGEI for years 2010, 2014, and 2016 will be gathered.

Specific activities include:

- Facilitate coordination between MARN and GIMBUT to develop actions for obtaining information about AFOLU.
- Develop under the coordination of GIMBUT the necessary actions for obtaining the information, and tabulating, processing, and presenting the necessary information to be used for calculations in the INVGEI for 2010, 2014, and 2016.
- Incorporate information from the INVGEI into the 3NC and 1BUR.

*2.2. Emissions inventory maps from the Forestry and Other Land Use subsector for 2010, 2014, and 2016 developed in accordance with the 2006 IPCC guidelines.*

The project will support the development of maps for the Forestry and Other Land Use subsector with data from 2010, 2014 (TNC), and for the 1BUR with data from 2016. Through this output information needed to build the INVGEI for years 2010, 2014, and 2016 will be gathered.

Specific activities include:

- Facilitate coordination between MARN and GIMBUT for developing the emissions inventory maps for the Forestry and Other Land Use subsector for the years 2010, 2014, and 2016.
- Carry out actions necessary under the guidance of GIMBUT to develop the forest cover and land use maps (for the years 2010, 2014, and 2016) that provide information about the categories that are proposed and endorsed by the IPCC and the UNFCCC.
- Develop inventory of GHG emissions based on the emissions inventory maps.
- Approval of the results of the GHG emissions estimates by the MARN.

*2.3. GHG emissions inventories (2010, 2014, and 2016) for the Energy sector (including the transportation subsector), and the Industrial Processes, AFOLU, and Wastes sectors integrated.*

The goal of this output is to have information from the years 2010, 2014 (TNC) and 2016 (BUR) for the Energy sector (including the transportation subsector), and the Industrial Processes, AFOLU, and Wastes sectors integrated in order to know and understand the amount of GHG emissions that the country produces.

Specific activities include:



- Coordinate actions between MARN and MAGA, INAB, CONAP, and the private sector to integrate information from the Energy sector (including the transportation subsector), Industrial Processes, AFOLU, and Wastes sectors for the years 2010, 2014, and 2016.
- Develop the emissions and absorption inventory of the AFOLU sector, including an update of information on land use (the map series for 2010, 2014, and 2016) in accordance with the 2006 IPCC guidelines.
- Collect, systematize, and analyze information about the characterization of cattle herds and the program for improving the characterization methodology.
- Collect, systematize, and analyze information about the use of organic and synthetic nitrogen fertilizers at the national level.
- Collect, systematize, and analyze information about the Energy sector (transportation subsector).
- Incorporate information about the Energy sector (including the transportation subsector), Industrial Processes, AFOLU, and Wastes sectors for 2010, 2014, and 2016 into the 3NC and the 1BUR.

*2.4. Arrangements for institutional management and trans-sector collaboration in developing the INVGEI (2010, 2014, and 2016) strengthened.*

Through this output, the satisfactory and permanent trans-sector coordination and collaboration are sought to facilitate the generation of information, calculations, and development of the INVGEI.

Specific activities include:

- Coordinate actions between the government and the private sector to facilitate and harmonize the generation of information for the INVGEI.
- Develop and establish communication mechanisms.
- Develop a work plan and schedule to obtain the information for the 3NC and 1BUR with the required quality and within the stipulated timeframe.
- Continue quality improvement works for the GHG Inventory and focus on the methods and approaches for data collection process, filling data gaps and supporting establishment of a sustainable system for developing GHG Inventory.

The INE of Guatemala is responsible for conducting the official censuses and surveys for updating the national statistics. With regard to agricultural activity, the INE conducts NAS that are part of the National Continuous Surveys Project (NCS). The INE coordinates the development of the NAS with the MAGA, which will in turn provide support for the development of the 3NC and 1BUR through the following studies: a) Collection, systematization, and analysis of information about the characterization of the cattle herd and the program to improve the characterization methodology; and b) Collection, systematization, and analysis of information on the use of organic and synthetic nitrogen fertilizers at the national level. These studies will be coordinated with the INE so that their methodology and systematization are harmonized with that applied by the INE for the NAS, and so that this information is gathered in a timely manner. This will serve to improve the process of information gathering, updating this information periodically, and making the data available to be used as input for building of the INVGEIs.

Component 3. Vulnerability Assessment and Adaptation to Climate Change:

During the 2NC, aspects related to vulnerability and adaptation to climate change were evaluated. Regarding vulnerability, the following aspects were assessed: changes in temperature, changes in precipitation, extreme events (droughts and tropical cyclones), and events related to climate

variability (El Niño Southern Oscillation [ENSO], cold fronts, and “canicula”). Climate projections for precipitation, temperature, and water availability are also presented, as well as an analysis of the vulnerability to climate change for human health, water resources, hydropower generation, livelihoods associated with basic grain production, and biodiversity. Assessment results indicate that there will be a change in the precipitation by region and scenario; the Central Highlands and Western and Eastern regions of the country will present the greatest changes in rainfall, with reductions of between 15% and 20%. Regarding the temperature, in the last 14 years, the temperature increased by 0.94°C nationally. Water availability is expected to decrease by up to 50% in the semi-arid zone of the country (dry corridor), which will increase by 2090.

Climate change and variability will have a strong impact on socioeconomic and environmental aspects, mainly in water availability, agricultural production, hydropower production, forest fires, land degradation and ecosystems, as well as in the recurrence of diseases in human health and in the livelihoods of rural communities.

Guatemala does not have the appropriate and relevant information about how climate change affects human health. As a subtropical country, the prevalence of illnesses transmitted by insects, mammals, and contaminated water bodies is known, but the effect of climate change on maximizing the transmission, development, and spread of these diseases on human health is not known. In addition, Guatemala depends on the rainy season for its water supply, which in recent years has had an intensity, distribution, and frequency that has affected agricultural production and the supply for communities in some regions of the country (principally the dry corridor). As such, it is essential to determine and know the vulnerability of human health and water resources to climate change. The project proposed herein will entail an exhaustive analysis of climate change in Guatemala to determine human health and natural resources (specifically, water resources) vulnerability. GEF funds will contribute towards achieving the following outputs:

*3.1 Report about the country's vulnerability in the areas of human health and water resources (with a gender focus) developed.*

This output will enable the country to have an overview as to how climate change may affect human health and the availability of water resources for human consumption and agricultural use.

Specific activities include:

- Define the objectives, progress, and expected outcomes of the study on the country's vulnerability with regard to human health and water resources (with a gender focus).
- Assess the country's vulnerability with regard to human health and water resources (with a gender focus). The methodology to be used to conduct this assessment will be chosen from the following: a) Analysis of vulnerability to climate change in the western highlands of Guatemala (CNCG —USAID, Rain Forest Alliance, and The Nature Conservancy); b) Studies about the country's vulnerability to food insecurity based on climate threats. (MAGA— World Food Programme [WFP]); c) Guide for evaluating vulnerability to climate change. National Ecological and Climate Change Institute (Mexico); and d) Vulnerability guidelines proposed within the UNFCCC.
- Present and communicate the results of the study on the vulnerability of human health and water resources to climate change (with a gender focus).
- Incorporate the assessment results into the 3NC and 1BUR.

*3.2. Report on the country's vulnerability to climate change and its effect on the Gross Domestic Product (GDP) for the period 2010-2016 updated and presented.*

This output will provide precise information as to how climate change affects the country's vulnerability and its effects on the economy.

Specific activities include:

- Define the objectives, progress, and outcomes of the study on the country's vulnerability and the impact on the GDP for 2010-2016.
- Update and present an analysis of the vulnerability and its effect on the GDP for 2010-2016.
- Develop the study on vulnerability and its impact on the GDP for 2010-2016.
- Present and communicate the results of the study on vulnerability and its effect on the GDP for 2010-2016.
- Incorporate the study results the 3NC and 1BUR.

The information that this output will provides will help to determine the vulnerability and risks associated with climate change, principally with regard to climate variability and extreme weather events. This will allow reorienting the national policies, strategies, plans, and projects to improve implementation of climate change adaptation measures.

#### Component 4. GHG Mitigation and domestic MRV:

Consistent with global efforts, Guatemala has been developing and implementing a series of tools and actions to contribute to mitigation of GHGs, in line with its legal framework and in compliance with the Climate Change Law, Decree 07-2013, from which the following four tools are derived: i) Energy plan, ii) Transportation regulation, iii) Compensation and incentives program for GHG reduction; and iv) Registry of GHG reduction projects. These tools, together with the Action Plan for Adaptation and Mitigation, the development of the REDD strategy, and various local initiatives, are of great importance to support decision making and comply with international mitigation commitments.

In the 2NC, Guatemala presented the most relevant actions developed related to climate change mitigation, including the Zero Footprint Initiative, the three forest policy instruments (PINFOR, PINPEP, and PROBOSQUES), the preparation of a National Action Plan for Adaptation and Mitigation of Climate Change (approved in 2016), the creation of the National Climate Change Fund (currently under development), and proposed goals for NDC. The 3NC will include a description of the main mitigation actions in the energy sectors (fuelwood, ethanol use as fuel, energy efficiency, transport subsector), agricultural sector, land use sector, and wastes sector. Several measures have been proposed to reduce emissions, such as the Clean Development Mechanism (CDM), voluntary carbon markets, and carbon footprint.

This component will improve each of the steps of the mitigation process through the development of a mechanism that provides reliable and ascertainable information, and through which this information can be updated in a continuous manner. This component will generate and record information that will support the impact of the mitigation actions and activities as well as their contribution to the development of the country, establish the mechanisms of the national MRV system as a continuous process, as well as the progress and results of the INDC proposal and other aspects related to the Paris Agreement. As part of this output, a report on the mitigation actions taken in the Energy, Industrial Processes, AFOLU, and Wastes sectors will be developed. To this end, the GEF will support the following:

*4.1 A system to collect, store, and manage information from projects and/or options for mitigation, adaptation, and vulnerability for the National Climate Change Information Management System (NCCIMS) in place.*

	<p>Through this output information related to mitigation, adaptation, and vulnerability will be obtained in an organized manner to facilitate its availability for immediate consultation.</p> <p>Specific activities include:</p> <ul style="list-style-type: none"> <li>• Assess mitigation actions developed for the Energy, Industrial Processes, AFOLU, and Wastes sectors.</li> <li>• Develop a tool to collect, store, and manage information about projects and/or mitigation, adaptation, and vulnerability options for the NCCIMS.</li> <li>• Facilitate access to the NCCIMS for government institutions, the private sector, organizations, and the general public.</li> </ul> <p><i>4.2 Follow-up, implementation and compliance with Guatemala's NDC as the main contribution to the UNFCCC Paris Agreement.</i></p> <p>Guatemala must comply with the commitments related to NDC. As such, follow-up will be conducted of the proposed activities and a roadmap will be laid out to ensure compliance.</p> <p>Specific activities include:</p> <ul style="list-style-type: none"> <li>• Assess Guatemala's NDC proposal for the financial and economic calculations of implementation as the main contribution to the UNFCCC Paris Agreement.</li> <li>• Develop a timetable and action plan for NDC implementation.</li> </ul> <p><i>4.3. The development process of national institutional arrangements and framework for domestic MRV supported.</i></p> <p>Guatemala will develop the necessary actions and institutional arrangements to implement a domestic MRV system. An assessment will be made of the different options and possibilities for the national MRV, taking into account national circumstances, existing policies and regulations, institutional arrangements, and technical capacities.</p> <p>Specific activities include:</p> <ul style="list-style-type: none"> <li>• Analyze the options and possibilities for establishing a domestic MRV system.</li> <li>• Organize meetings with the key agencies that might be involved in MRV to discuss opportunities and gaps.</li> <li>• Provide support to the development process of national institutional arrangements and framework for domestic MRV.</li> <li>• Compile and approve the section on a domestic MRV system for its incorporation into the 1BUR.</li> </ul> <p>These activities respond to the actions proposed in the Climate Change Law and the National Policy on Climate Change, which will allow Guatemala to have better and more control over mitigation actions and a greater knowledge about mitigation, facilitating the review of related policies and instruments.</p> <p><b>Submission of the 1BUR and 3NC</b></p> <p>In line with the scope of the outputs of the four components described above, the 3NC and 1BUR project will be submitted to the UNFCCC in September of 2019. The 1BUR will be based on the 2016 INVGEI, and will also be submitted to the UNFCCC in September of 2019.</p>
<p><b>D. DESCRIBE, IF POSSIBLE, THE EXPECTED COST-</b></p>	<p>The 3NC and 1BUR project contributes to Guatemala's commitments under the UNFCCC to enable the country to address climate change considerations (reductions of GHG emissions, energy use efficiency, and reduction of vulnerability to climate change). Increasing Guatemala's capacity</p>

<p><b>EFFECTIVENESS OF THE PROJECT:</b></p>	<p>to measure, forecast, and evaluate its GHG emissions and identify the most vulnerable sectors will be achieved in a cost-effective way.</p> <p>The project will support the incorporation of climate change considerations into key policy and strategy development documents and will strengthen technical and institutional capacities related to climate change. Although the project is not intended to reduce GHG emissions directly, it will contribute to a better understanding on how to reduce carbon emissions and the vulnerability of key sectors and communities around the country. The development of the 3NC draws on the experiences and results of two previous NCs and the completion of four INVGEI; in particular, activities will focus on areas and sectors that have been identified as key for the GHG balance in Guatemala (AFOLU, Energy, Industrial Processes, and Wastes). A central element of the strategy is to enhance the cost-effectiveness of the 3NC/1BUR Project through the capitalization of work relations built during the project implementation, and on existing experience with climate change within national institutions and other related UNDP projects, and as part of the international cooperation in Guatemala.</p> <p>The total project enabling cost is \$852,000 USD. When all components of the project are implemented, Guatemala's capacity to meet its obligations under the UNFCCC will be strengthened significantly and on a sustainable level, overcoming barriers that have limited the ability of the GoG to deliver the NCs and BURs in a timely manner. The project will also ensure socioeconomic benefits by mainstreaming gender and considering human health and water resources' vulnerability to climate change.</p> <p>Finally, through national multi-sectoral stakeholder consultations involving civil society, national counterparts, local authorities, local communities, and other related groups, participation in the project will be ensured, creating broader national ownership of the enabling activities on the climate change project's results.</p>
<p><b>E. DESCRIBE THE BUDGETED M&amp;E PLAN:</b></p>	<p>The project results as outlined in the project results framework will be monitored annually and evaluated periodically during project implementation to ensure the project effectively achieves these results. The Project monitoring and evaluation plan will also facilitate learning and ensure the exchange of knowledge and its broad dissemination aimed at supporting the scaling-up and replication of project outcomes.</p> <p>Project-level monitoring and evaluation will be undertaken in compliance with UNDP requirements as outlined in the <a href="#">UNDP POPP and UNDP Evaluation Policy</a>. While these UNDP requirements are not outlined in this enabling activity request, the UNDP Country Office will work with the relevant project stakeholders to ensure UNDP M&amp;E requirements are met in a timely fashion and to high quality standards. Additional mandatory GEF-specific M&amp;E requirements (as outlined below) will be undertaken in accordance with the <a href="#">GEF M&amp;E policy</a> and other relevant GEF policies<sup>4</sup>.</p> <p>In addition to these mandatory UNDP and GEF M&amp;E requirements, other M&amp;E activities deemed necessary to support project-level adaptive management will be agreed during the Project Inception Workshop and will be detailed in the Inception Report. This will include the exact role of project target groups and other stakeholders in project M&amp;E activities including the GEF Operational Focal Point and national/regional institutes assigned to undertake project monitoring. The GEF Operational Focal Point will strive to ensure consistency in the approach taken to the GEF-specific M&amp;E requirements across all GEF-financed projects in the country.</p> <p><b>M&amp;E Oversight and monitoring responsibilities:</b></p>

<sup>4</sup> See [https://www.thegef.org/gef/policies\\_guidelines](https://www.thegef.org/gef/policies_guidelines).

**Project Manager:** The Project Manager is responsible for day-to-day project management and regular monitoring of project results and risks, including social and environmental risks. The Project Manager will ensure that all project staff maintain a high level of transparency, responsibility and accountability in M&E and reporting of project results. The Project Manager will inform the Project Board, the UNDP Country Office and the UNDP-GEF Regional Technical Advisor (RTA) of any delays or difficulties as they arise during implementation so that appropriate support and corrective measures can be adopted.

The Project Manager will develop annual work plans based on the multi-year work plan, including annual output targets to support the efficient implementation of the project. The Project Manager will ensure that the standard UNDP and GEF M&E requirements are fulfilled to the highest quality. This includes, but is not limited to, ensuring the results framework indicators are monitored annually, and that the monitoring of risks and the various plans/strategies developed to support project implementation (e.g. gender strategy, KM strategy etc.) occur on a regular basis.

**Project Board:** The Project Board will take corrective action as needed to ensure the project achieves the desired results. The Project Board will hold project reviews to assess the performance of the project and appraise the Annual Work Plan for the following year. In the project's final year, the Project Board will hold an end-of-project review to capture lessons learned and discuss opportunities for scaling up and to highlight project results and lessons learned with relevant audiences.

**Project Implementing Partner:** The MARN is responsible for providing any and all required information and data necessary for timely, comprehensive and evidence-based project reporting, including results and financial data, as necessary and appropriate.

**UNDP Country Office:** The UNDP Country Office will support the Project Manager as needed, including through annual supervision missions. The annual supervision missions will take place according to the schedule outlined in the Annual Work Plan. Supervision mission reports will be circulated to the project team and Project Board within one month of the mission. The UNDP Country Office will initiate and organize key GEF M&E activities. The UNDP Country Office will also ensure that the standard UNDP and GEF M&E requirements are fulfilled to the highest quality.

The UNDP Country Office is responsible for complying with all UNDP project-level M&E requirements as outlined in the [UNDP POPP](#). This includes ensuring the UNDP Quality Assurance Assessment during implementation is undertaken annually; that annual targets at the output level are developed, and monitored and reported using UNDP corporate systems; the regular updating of the ATLAS risk log; and, the updating of the UNDP gender marker on an annual basis based on gender mainstreaming progress reported in the UNDP ROAR. Any quality concerns flagged during these M&E activities must be addressed by the UNDP Country Office and the Project Manager.

The UNDP Country Office will retain all M&E records for this project for up to seven years after project financial closure in order to support ex-post evaluations undertaken by the UNDP Independent Evaluation Office (IEO) and/or the GEF IEO.

**UNDP-GEF Unit:** Additional M&E and implementation quality assurance and troubleshooting support will be provided by the UNDP-GEF Regional Technical Advisor and the UNDP-GEF Directorate as needed.

**Audit:** The project will be audited according to UNDP Financial Regulations and Rules and applicable audit policies on NIM implemented projects.<sup>5</sup>

**Additional GEF monitoring and reporting requirements:**

Inception Workshop and Report: A project inception workshop will be held within two months after the project document has been signed by all relevant parties to, amongst others:

- a) Re-orient project stakeholders to the project strategy and discuss any changes in the overall context that influence project strategy and implementation;
- b) Discuss the roles and responsibilities of the project team, including reporting and communication lines and conflict resolution mechanisms;
- c) Review the results framework and finalize the indicators, means of verification and monitoring plan;
- d) Discuss reporting, monitoring and evaluation roles and responsibilities and finalize the M&E budget; identify national/regional institutes to be involved in project-level M&E; discuss the role of the GEF OFP in M&E;
- e) Update and review responsibilities for monitoring the various project plans and strategies, including the risk log; Environmental and Social Management Plan and other safeguard requirements; the gender strategy; the knowledge management strategy, and other relevant strategies;
- f) Review financial reporting procedures and mandatory requirements, and agree on the arrangements for the annual audit; and
- g) Plan and schedule Project Board meetings and finalize the first year annual work plan.

The Project Manager will prepare the inception report no later than one month after the inception workshop. The inception report will be prepared in official UN language and duly signed by designated persons, cleared by the UNDP Country Office and the UNDP-GEF Regional Technical Advisor, and will be approved by the Project Board.

Bi-annual progress: Status Survey Questionnaires to indicate progress and identify bottlenecks as well as technical support needs will be carried out twice a year, in line with GEF and UNFCCC reporting requirements for NCs and BURs.

Lessons learned and knowledge generation: Results from the project will be disseminated within and beyond the project intervention area through existing information sharing networks and forums. The project will identify and participate, as relevant and appropriate, in scientific, policy-based and/or any other networks, which may be of benefit to the project. The project will identify, analyze and share lessons learned that might be beneficial to the design and implementation of similar projects and disseminate these lessons widely. There will be continuous information exchange between this project and other projects of similar focus in the same country, region and globally.

End of Project: During the last three months, the project team will prepare the Project Terminal Report. The Terminal Report shall be discussed with the Project Board during an end-of-project review meeting to discuss lesson learned and opportunities for scaling-up.

This comprehensive report will summarize the results achieved (objectives, outcomes, outputs), lessons learned, problems met and areas where results may not have been achieved. It will also

<sup>5</sup> See guidance here: <https://info.undp.org/global/popp/frm/pages/financial-management-and-execution-modalities.aspx>

	lay-out recommendations for any further steps that may need to be taken to ensure sustainability and replicability of the project's results.
<b>F. EXPLAIN THE DEVIATIONS FROM TYPICAL COST RANGES (WHERE APPLICABLE):</b>	NA

**PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)**

**A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT(S) ON BEHALF OF THE GOVERNMENT(S):** (Please attach the [\*Operational Focal Point endorsement letter\(s\)\*](#) with this template).


NAME	POSITION	MINISTRY	DATE (Month, day, year)
Dr. Sydney Alexander Samuels Milson	Minister	Ministry of the Environment and Natural Resources (MARN)	January, 31,2017

**B. CONVENTION PARTICIPATION**

CONVENTION	DATE OF RATIFICATION/ ACCESSION (mm/dd/yyyy)	NATIONAL FOCAL POINT	
UNCBD	10/08/1995	Elder Manrique Figueroa Ortiz. National Council of Protected Areas (CONAP)	
UNFCCC	12/15/1995	Sydney Alexander Samuels Milson Ministry of the Environment and Natural Resources (MARN)	
UNCCD	09/10/1998	Sydney Alexander Samuels Milson Ministry of the Environment and Natural Resources (MARN)	
STOCKHOLM CONVENTION	07/30/2008	Sydney Alexander Samuels Milson Ministry of the Environment and Natural Resources (MARN)	
	DATE SIGNED (MM/DD/YYYY)	NATIONAL FOCAL POINT	DATE OF NOTIFICATION UNDER ARTICLE 7 TO THE MINAMATA CONVENTION SECRETARIAT
MINAMATA CONVENTION	10/10/2013	Sydney Alexander Samuels Milson Ministry of the Environment and Natural Resources (MARN)	Pending of National Congress Ratification



### C. GEF AGENCY(IES) CERTIFICATION

<b>This request has been prepared in accordance with GEF policies<sup>6</sup> and procedures and meets the standards of the GEF Project Review Criteria for Climate Change Enabling Activity approval in GEF 6.</b>					
Agency Coordinator, Agency name	Signature	Date (Month, day, year)	Project Contact Person	Telephone	E-mail Address
Ms. Adriana Dinu, UNDP-GEF Executive Coordinator		June, 2, 2017	Mr. Yamil Bonduki, Sr. Program Manager, UNDP (Green-LECRDs)	+1-212-906-6659	yamil.bonduki@undp.org

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<sup>6</sup> GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, and SCCF