



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:	Third National Communication and First Biennial Update Report to the UNFCCC		
Country(ies):	Cuba	GEF Project ID: ¹	
GEF Agency(ies):	UNDP	GEF Agency Project ID:	5214
Other Executing Partner(s):	Ministry of Science, Technology and Environment	Submission Date:	28 Apr 2017
GEF Focal Area(s):	Climate Change	Project Duration (Months)	48
Type of Report:	Biennial Update Report (BUR) National Communication (NC)	Expected Report Submission to Convention	First BUR: Dec. 2020 Third NC: Dec. 2020

A. PROJECT FRAMEWORK*

Project Objective: Support the Government of Cuba to prepare its Third National Communication (TNC) and First Biennial Report (FBUR) under the UNFCCC				
Project Component	Project Outcomes	Project Outputs	(In \$)	
			GEF Project Financing	Confirmed Co-financing ²³
1. National circumstances; institutional arrangements; other relevant information and constraints, gaps and support needs	1.1. Information on national circumstances concerning the physical and socio-economic characteristics of the country	1.1.1 Update Cuba's national circumstances in the context of UNFCCC implementation measures, gaps and needs identified in the SNC. 1.1.2 Compile, analyze and update data and information on geography, climate, natural resources and socio-economic aspects (economy, education, population, health, livelihoods) relevant to mitigation, adaptation and other activities with respect to climate change. 1.1.3 Analyze specific needs and concerns associated with the adverse effects of climate change, national development goals, priorities and related programmes, including the impact of response measures under implementation.	130,000	63,980

¹Project ID number will be assigned by GEFSEC and entered by Agency in subsequent document submission.

² Co-financing for enabling activity is encouraged but not required.

³Cuban pesos (CUPs)

	<p>1.2. Other information considered relevant to the objective of the Convention: policies, strategies and programmes; transfer of technology; education and public awareness; systematic observation and scientific research; capacity-building and south-south cooperation; public information and networking updated</p> <p>1.3 Financial, technical and national-capacity needs, gaps and constraints.</p>	<p>1.1.4 Collect and analyze disaggregated data, applying an appropriate gender and generational approach to vulnerabilities and participation in decision-making connected with climate change mitigation and adaptation.</p> <p>1.1.5 Describe the institutional arrangements in place for the preparation of national communications and BURs.</p> <p>1.2.1 Report on the progress made towards implementing national policies, strategies and programmes that contribute to the objective of the Convention.</p> <p>1.2.2 Report on national programmes on systematic observation, early warning systems and updated research programmes.</p> <p>1.2.3 Advance the progress made in the implementation of national research programmes relevant to climate change.</p> <p>1.2.4 Report on the progress made in the incorporation of climate change issues into the various levels of education and training of professionals.</p> <p>1.2.5 Update the education, training and communication programmes to ensure active participation of various population sectors in solving problems and adopting good environmental practices associated with climate change, as part of the national implementation of the Doha Work Programme, Article 6 of the UNFCCC.</p> <p>1.2.6 Provide better training to human resources and widely disseminate knowledge about climate change, promoting gender and generational equity to ensure sustainability in climate change related activities.</p> <p>1.2.7 Strengthen the webpage www.cambioclimatico.cu and the networks for the preparation of national communications and biennial reports.</p> <p>1.3.1. Provide information on financial, technical and national-capacity needs, gaps and constraints for the preparation of national communications.</p> <p>1.3.2. Provide information on major needs and constraints for UNFCCC</p>		
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		implementation in Cuba.		
2. National greenhouse gas (GHG) inventory	2. The national greenhouse gas (GHG) inventory prepared for the 2016 under the TNC, and the information on the 1990-2016 period is updated for the first BUR.	<p>2.1.1 Collect and analyze activity data necessary for GHG estimations. Improve the database and bridge data gaps to reduce inventory uncertainty.</p> <p>2.1.2 Prepare the 2016 GHG inventory for the TNC, based on the 1996 IPCC Guidelines, introducing elements of the 2006 Guidelines, and estimating emissions in six sectors: energy, industrial processes, use of solvents and other products, agriculture, land-use change and forestry activities, and wastes.</p> <p>2.1.3 Update the GHG inventory in the 1990-2016 period for the first BUR, based on the 1996 IPCC Guidelines, introducing elements of the 2006 Guidelines, and estimating emissions in six sectors: energy, industrial processes, use of solvents and other products, agriculture, land-use change and forestry activities, and wastes.</p> <p>2.1.4 Analyze key categories in the inventory.</p> <p>2.1.5 Develop procedures and measures for activity data collection and archiving, as quality control and quality assurance (QC/QA) methods.</p>	185,000	152,222
3. Programmes containing adaptation measures (V&A)	3.1. The outcome of the Cuban strategy to address climate change and the impact of climate change on selected sectors and ecosystems are assessed.	<p>3.1.1 Develop climate change scenarios for 2030, 2050 and 2100 based mainly on modelled results included in the fifth Climate Model Intercomparison Project (CMIP).</p> <p>3.1.2 Expand institutional capacity to ensure appropriate use of climate projection results, model sets and uncertainty analysis.</p> <p>3.1.3 Elaborate on the evaluation of processes that regulate climate variability, climate extremes, and on analytical methods for climate change detection and attribution.</p> <p>3.1.4 Conduct vulnerability studies in SNC identified areas and activities, including new sectors (Water resource, Marine and Coastal zone, Agriculture, Forest, Biodiversity, Human settlement, Human health, Tourism).</p> <p>3.1.5 Develop case studies on impacts of climate change and adaptation measures.</p> <p>3.1.6 Assess the progress made in the implementation of SNC proposed adaptation measures.</p> <p>3.1.7 Prepare action plans to raise</p>	190,000	404,122

		awareness about climate change vulnerability and adaptation, seeking to promote resilience and sustainability, while strengthening gender and generational equity, cultural relevance, respect for diversity, and the existing legal framework		
4. Programmes containing mitigation measures; and domestic MRV	<p>4.1 The measures adopted or to be adopted for the preparation, implementation, publication and regular update of programmes containing climate change mitigation measures are described.</p> <p>4.2. Establishment of domestic Measurement, Reporting and Verification system supported</p>	<p>4.1.1 Review mitigation options proposed for the energy and non-energy sectors, taking 2010 as base year, according to the SNC information.</p> <p>4.1.2 Identify mitigation potential in the energy sector (residential, electricity generation, transport, industry, and agricultural and livestock production) and the non-energy sector (industrial processes, agriculture and forestry activities, and wastes), elaborating on the SNC evaluations.</p> <p>4.1.3 Update the SNC mitigation scenarios for a first period up to 2030 and a second period up to 2050, incorporating new policies for improved energy efficiency, use of renewable sources of energy, and the analysis of synergies between adaptation and mitigation measures.</p> <p>4.1.4 Identify appropriate mitigation actions and contributions and the sectors where they should be implemented.</p> <p>4.1.5 Provide information on mitigation measures adopted as Programmes of Activities (POAs), National Appropriate Mitigation Actions (NAMAs), Nationally Determined Contributions (NDCs), as well as new measures, their implementation and impact assessment.</p> <p>4.1.6 Develop capacities to prepare the first Cuban BUR, including national mitigation actions, measurement systems, monitoring, reporting and verification (MRV), national registration system, and assessment of additional benefits.</p> <p>4.2.1 Options and possibilities to develop a domestic MRV system assessed.</p> <p>4.2.2 Identification of the requirements for development of institutional arrangements and the national MRV framework.</p> <p>4.2.3 Report describing the requirements and recommendations for</p>	185,000	145,422

		development of institutional mechanisms for national MRV.		
5. Submission of the FBUR and the TNC, monitoring and evaluation	5. Compilation and preparation of the TNC and the BUR, including Executive Summary and translated versions	5.1 Prepare and translate into English the TNC and the BUR for submission in 2020. 5.2. Project financial and progress reports prepared and submitted. 5.3. End of project report and lessons learned compiled.	84,550	6,954
Subtotal			774,550	772,700
Project Management Cost ⁴ (including Direct Project Cost: up to 21,000)			77,450	203,300
Total Project Cost			852,000	976,000

* 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 (US\$)
Recipient Government	Ministry of Science, Technology and Environment	Cash (562,000) In kind (414,000)	976,000
Total Co-financing			976,000

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) ^{b)}	Total (c)=a+b
UNDP	GEFTF	CUBA	CLIMATE CHANGE	CC-M	852,000	80,940	932,940
Total GEF Resources					852,000	80,940	932,940

a) Refer to the Fee Policy for GEF Partner Agencies

⁴ This is the cost associated with the unit executing the project on the ground. It could be financed out of trust funds 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

<p>A. ENABLING ACTIVITY BACKGROUND AND CONTEXT (Provide brief information about projects implemented since a country became party to the convention and results achieved):</p>	<p>The Republic of Cuba is an island State that has been a Party to the United Nations Framework Convention on Climate Change (UNFCCC) since 5 March 1994. It signed the instrument in Rio de Janeiro, at the United Nations Conference on Environment and Development, in June 1992 and ratified it on 5 January 1994. It became the 52nd State to do so. Cuba has been a Party to the Kyoto Protocol since July 2002. It has also been taking an active part in IPCC activities since 1993, including representation in its Bureau and participation in the preparation of IPCC evaluation reports (from the second to the fifth reports).</p> <p>In Cuba, the first climate change related works were undertaken in 1991, when the Academy of Sciences established the National Commission on Climate Change. It conducted a preliminary study on the potential impact of climate change, building upon the 1990 and 1992 IPCC reports. It also assessed available capacities, data requirements, and constraints in connection to the climate observation and atmosphere composition.</p> <p>The National Focal Point for the United Nations Framework Convention on Climate Change and the Kyoto Protocol thereto is the Ministry of Science, Technology and Environment (CITMA). Cuba submitted its First National Communication (FNC) in September 2001.</p> <p>The Second National Communication (SNC) was submitted in October 2015. It was developed with the financial support provided by the Global Environment Facility (GEF) through UNDP as implementing agency. This project strengthened the capacities that had been built during the FNC and was executed by teams that have been working in a sustained manner ever since, with the support of the Cuban State.</p> <p>The Research and Development Programme and Project System of the Government of Cuba backed up the implementation of scientific initiatives whose results were favourably assessed, especially those concerning greenhouse gas inventory and climate change mitigation, vulnerability and adaptation. It facilitated the integration of scientists, professionals and institutions in the SNC for knowledge generation and management. Between 1995 and 2013, number of fundamental science programmes were implemented for the SNC: “<i>Global Changes and the Cuban Environment</i>” (1995 – 2010) and “<i>Terrestrial and Spatial Climate and Weather Forecast and Analysis</i>” (1999 – 2012). The results informed decision-making processes at various levels. Climate change was one of the priorities under these programmes delivering important scientific results that have enriched the CC knowledge. Since 2012, there has been a new national scientific programme under implementation. It is called “<i>Climate Change in Cuba: Impact, Mitigation and Adaptation</i>”.. All these programmes have supported the implementation of the UNFCCC in Cuba and have contributed results and resources to the process of preparation of national communications. At the same time, the country is developing a Programme to address climate change. It monitors the implementation of measures related to compliance with this Convention at the Executive Committee of the Council of Ministers.</p> <p>Cuba presented its Intended Nationally Determined Contributions (INDCs) on</p>
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	<p>23 November 2015. They are conceived as an on-going process to address climate change, which was initiated in 1992 and continues today under the principles and mandates of the Convention, particularly the differentiated obligations stipulated in Article 4 thereof. The INDCs consider adaptation as the main country priority and make emphasis on reducing coastal and human health vulnerability, recovering mangrove areas, and incorporating the adaptation dimension into programmes, plans and projects related to food production, comprehensive water management, land-use planning, forestry, fisheries, tourism and health.</p> <p>The project for the preparation of the TNC to the UNFCCC will bring benefits to large number of actors, including scientific and academic institutions as well as production and service facilities that will conduct technical evaluations on the components of the national communication. One of the benefits involves increased institutional capacity. Many scientists and technicians will enhance their knowledge and use of evaluation tools. The studies to be conducted will improve emission parameters in key source categories, such as emissions from enteric fermentation in cattle and solid waste disposal sites. They will also increase the level of public knowledge on climate change and help implement effective actions by civil society organizations, decision-makers at different levels of government, and production and service facilities. When the TNC is completed, the government and society at large will be in a better position to introduce the climate change dimension into relevant national policies and measures.</p> <p>The international community will also benefit from evaluation results under the project and from the national greenhouse gas inventory. The Conference of the Parties and the entire world will be informed of the progress made by a non-Annex I (NAI) island State in UNFCCC implementation.</p> <p>The TNC and the first BUR, building upon the work done at the SNC, will include an assessment of the proposals under implementation.</p> <p>The first BUR and the TNC will be submitted to the UNFCCC Secretariat in December 2020.</p>
<p>B. ENABLING ACTIVITY GOALS, OBJECTIVES, AND ACTIVITIES (The proposal should briefly justify and describe the project framework. Identify also key stakeholders involved in the project including the private sector, civil society</p>	<p>The proposed project is prepared in line with the GEF-6 strategic focal area on climate change mitigation, objective CCM3: fostering enabling conditions to mainstream mitigation concerns into sustainable development strategies. Programme 5 of this objective aims to mainstream the integration of climate considerations into the national planning process and to help countries mainstream mitigation action in support of the 2030 Agenda.</p> <p>The main objectives of the project include:</p> <ol style="list-style-type: none"> 1. Preparing and submitting the Third National Communication of Cuba, which will provide information to the Conference of the Parties to the UNFCCC, (as mandated by Article 4 and 12 of the Convention). 2. Preparing and submitting the First Biennial Update Report consistent with the reporting requirements contained in decision 2/CP.17, annex III, which will strengthen national monitoring and verification mechanisms, and the assessment of collateral benefits. 3. Reinforcing the technical and institutional capacity of Cuba to implement commitments under the UNFCCC and helping integrate and synthesize

<p>organizations, local and indigenous communities, and their respective roles, as applicable. Describe also how gender equality and women's empowerment are considered in project design and implementation):</p>	<p>knowledge and information relating to climate change and linkages with sectoral and territorial development priorities.</p> <p>The project will also help to:</p> <ol style="list-style-type: none"> 1. Inventory GHG emissions and removals in 2016. 2. Conduct integrated assessments of the impact of climate change in pilot areas to be developed as case studies. 4. Improve the National Programme to Address Climate Change under policies that facilitate appropriate adaptation and mitigation. 5. Analyze specific gender needs and incorporate them into policy proposals. 6. Update financial, technical and related-capacity constraints, deficiencies and needs, disseminate results, and promote the national communication. <p>Stakeholder involvement and consultation processes are critical to the success of the project. An effective engagement of key stakeholders is envisaged during project preparation, implementation, monitoring and evaluation to enhance ownership of the TNC and BUR processes and make these reports more responsive to national needs. The project proposal intends to strengthen stakeholder participation to collectively engage in addressing climate change issues and challenges in Cuba. The stakeholders under the project are expected to come from a wide range of backgrounds, including line ministries and agencies, local communities, local authorities and NGOs, mass media, research institutions, private sector and international organizations, with particular emphasis on related sectors.</p>																												
<table border="1"> <thead> <tr> <th data-bbox="435 1039 787 1060">Stakeholder</th> <th data-bbox="803 1039 1511 1060">Role</th> </tr> </thead> <tbody> <tr> <td data-bbox="435 1066 787 1150">Ministry Science, Technology, Environment</td> <td data-bbox="803 1066 1511 1150">Technical and administrative coordinator. GHG inventory, vulnerability and adaptation, mitigation, other relevant information. BUR</td> </tr> <tr> <td data-bbox="435 1157 787 1178">Ministry of Agriculture</td> <td data-bbox="803 1157 1511 1220">Participant. GHG inventory, vulnerability and adaptation, mitigation, other relevant information. BUR</td> </tr> <tr> <td data-bbox="435 1226 787 1247">Institute of Physical Planning</td> <td data-bbox="803 1226 1511 1289">Participant. GHG inventory, vulnerability and adaptation, mitigation, other relevant information. BUR</td> </tr> <tr> <td data-bbox="435 1295 787 1358">National Water Resource Institute</td> <td data-bbox="803 1295 1511 1358">Participant. GHG inventory, vulnerability and adaptation, mitigation, other relevant information. BUR</td> </tr> <tr> <td data-bbox="435 1365 787 1386">Ministry of Public Health</td> <td data-bbox="803 1365 1511 1428">Participant. GHG inventory, vulnerability and adaptation, mitigation, other relevant information. BUR</td> </tr> <tr> <td data-bbox="435 1434 787 1497">National Office for Statistics and Information</td> <td data-bbox="803 1434 1511 1497">Participant. GHG inventory, vulnerability and adaptation, mitigation, other relevant information. BUR</td> </tr> <tr> <td data-bbox="435 1503 787 1524">Ministry of Transport</td> <td data-bbox="803 1503 1511 1566">Participant. GHG inventory, vulnerability and adaptation, mitigation, other relevant information. BUR</td> </tr> <tr> <td data-bbox="435 1572 787 1593">Ministry of Mines and Energy</td> <td data-bbox="803 1572 1511 1635">Participant. GHG inventory, vulnerability and adaptation, mitigation, other relevant information. BUR</td> </tr> <tr> <td data-bbox="435 1642 787 1663">Ministry of Higher Education</td> <td data-bbox="803 1642 1511 1705">Participant. GHG inventory, vulnerability and adaptation, mitigation, other relevant information. BUR</td> </tr> <tr> <td data-bbox="435 1711 787 1732">Ministry of Education</td> <td data-bbox="803 1711 1511 1774">Participant. Vulnerability and adaptation, mitigation, other relevant information.</td> </tr> <tr> <td data-bbox="435 1780 787 1843">Ministry of Economy and Planning</td> <td data-bbox="803 1780 1511 1843">Participant. GHG inventory, vulnerability and adaptation, mitigation, other relevant information. BUR</td> </tr> <tr> <td data-bbox="435 1850 787 1871">Ministry of Construction</td> <td data-bbox="803 1850 1511 1913">Participant. GHG inventory, vulnerability and adaptation, mitigation, other relevant information.</td> </tr> <tr> <td data-bbox="435 1919 787 1940">Ministry of Culture</td> <td data-bbox="803 1919 1511 1982">Participant. Vulnerability and adaptation, mitigation, other relevant information.</td> </tr> </tbody> </table>	Stakeholder	Role	Ministry Science, Technology, Environment	Technical and administrative coordinator. GHG inventory, vulnerability and adaptation, mitigation, other relevant information. BUR	Ministry of Agriculture	Participant. GHG inventory, vulnerability and adaptation, mitigation, other relevant information. BUR	Institute of Physical Planning	Participant. GHG inventory, vulnerability and adaptation, mitigation, other relevant information. BUR	National Water Resource Institute	Participant. GHG inventory, vulnerability and adaptation, mitigation, other relevant information. BUR	Ministry of Public Health	Participant. GHG inventory, vulnerability and adaptation, mitigation, other relevant information. BUR	National Office for Statistics and Information	Participant. GHG inventory, vulnerability and adaptation, mitigation, other relevant information. BUR	Ministry of Transport	Participant. GHG inventory, vulnerability and adaptation, mitigation, other relevant information. BUR	Ministry of Mines and Energy	Participant. GHG inventory, vulnerability and adaptation, mitigation, other relevant information. BUR	Ministry of Higher Education	Participant. GHG inventory, vulnerability and adaptation, mitigation, other relevant information. BUR	Ministry of Education	Participant. Vulnerability and adaptation, mitigation, other relevant information.	Ministry of Economy and Planning	Participant. GHG inventory, vulnerability and adaptation, mitigation, other relevant information. BUR	Ministry of Construction	Participant. GHG inventory, vulnerability and adaptation, mitigation, other relevant information.	Ministry of Culture	Participant. Vulnerability and adaptation, mitigation, other relevant information.	
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Ministry of Tourism	Participant. GHG inventory, vulnerability and adaptation, mitigation, other relevant information. BUR
Civil Defense Staff	Participant. GHG inventory, vulnerability and adaptation, mitigation, other relevant information. BUR
NGOs CUBASOLAR	Participant. GHG inventory, vulnerability and adaptation, mitigation, other relevant information. BUR
NGOs Cuban United Nations Association	Participant. Vulnerability and adaptation, mitigation, other relevant information. BUR
NGOs Cuban Association Writers and Journalists	Participant. Vulnerability and adaptation, mitigation, other relevant information. BUR

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 implemented.

A gender disaggregated analysis approach will be applied, and a gender-sensitive stakeholders and partners' involvement plan will be adopted. Understanding how the different social roles and economic status of men and women affect and are affected differently by climate change will improve actions taken to adapt to and mitigate climate change. In this regard, the update of the national circumstances chapter will consider the gender dimension to better understand how the different roles of men and women in social and economic circumstances may affect Cuba's ability to deal with mitigating and adapting to climate change.

The project will perform a study to analyze the role of gender in adaptation and mitigation activities, policy formulation, and knowledge. The expected findings will inform recommendations for most of the project outcomes (National Circumstances, V&A, Mitigation, etc.).

Efforts will also be made to have acceptable gender representation in project management structures (committees, institutional frameworks, technical team) and in capacity-building actions (training, workshops).

Institutions will be consulted on gender issues at the national level. The consultation will include ministries, civil society organizations, as well as research institutions and development partners working on gender issues.

C. DESCRIBE THE ENABLING ACTIVITY AND INSTITUTIONAL FRAMEWORK FOR PROJECT IMPLEMENTATION (discuss the work intended to be undertaken)

Institutional framework:
 Since the First National Communication (FNC) was developed, a good practice has been to prepare the communication under a continuous, uninterrupted cycle. Networking on the three main components of the National Communication: National Greenhouse Gas Emission and Removal Inventory (INERGEI); Climate Change Mitigation; and Vulnerability, Impact and Adaptation has ensured the process continuity. These networks have been under operation since the FNC, and their members have been involved in various research projects with national and international funding. The networks grew during the SNC, when new working groups (transfer of technology and education & awareness) were integrated.

and the output expected from each activity as outlined in Table A).

The TNC will be prepared by a technical team led by the project manager, made up of project component coordinators, and supported by an administrator. The director's office will be located at the Technical Unit on Climate Change under the umbrella of the Institute of Meteorology (INSMET), whose responsibilities include providing support for the preparation of national communications and biennial reports. Each component will be taken up by technical groups composed of national experts who work at relevant institutions and have gained experience in the preparation of the first and second national communications. New members will be incorporated if necessary. The technical work and assessments undertaken by project related institutions and experts will be approved in accordance with existing standards. They will later be submitted for discussion and adoption at technical workshops and seminars to be convened by the technical team in charge of the TNC. The final results will be put together by a drafting team made up mainly of project component coordinators who will prepare the draft text of the TNC. National statistical data will be supplied mostly by the National Office of Statistics and Information (ONEI) and by other relevant ministries and institutions.

The TNC and BUR approval process will consist of the following steps:

1. The drafts will be circulated as scheduled for consultation by all relevant ministries and institutions in the country.
2. After consulting the relevant authorities, the necessary corrections will be introduced by the drafting team.
3. The final texts of the TNC and the BUR will be submitted to CITMA, lead agency for science, technology and environment and for the execution of the TNC and the BUR for final approval.
4. Once the TNC and the BUR are approved, they will be published and submitted to the UNFCCC Secretariat by CITMA in its capacity as National Focal Point.

For the development of the TNC, the institutional arrangements made for the SNC will be used, including the Technical Unit on Climate Change at the Institute of Meteorology (INSMET).

1. The Ministry of Foreign Trade and Investment (MINCEX), which is the UNDP counterpart in Cuba, is the public authority in charge of coordinating and implementing international collaboration in the country.
2. This project will be implemented by the Government of the Republic of Cuba under the national implementation modality (NIM). The overall technical responsibility for the project falls to the Ministry of Science, Technology and Environment (CITMA), which is the lead national agency for the scientific, technological and environmental policy of the country and the national focal point for the UNFCCC. To this end, CITMA will be represented by the Environment Agency (AMA) for control and supervision of project execution and coordination by INSMET. UNDP will monitor all project activities and performance in its capacity as implementing agency.
3. The coordination between and among institutions and actors will be assigned to a National Steering Committee (NSC) made up of CITMA, MINCEX and UNDP. The NSC will meet at least twice a year, will be led by CITMA, and will be responsible mainly for conducting the implementation process.

4. The project execution coordination will be assigned to the Technical Unit on Climate Change (UTCC), based at the Institute of Meteorology. This unit will be assisted by those in charge of TNC components and other specialists working for scientific and academic institutions involved in the project.

UNDP will act GEF Implementing Agency and will monitor and support implementation of project activities in line with UNDP-GEF standard procedures. UNDP will be responsible for reporting, monitoring and evaluation of the project to GEF, providing a substantive support to the project team in meeting the administrative, finance and management requirements.

Activities for project implementation:

All project components will be developed applying the gender and generational approach, as appropriate.

Component 1. National circumstances; institutional arrangements; other relevant information and constraints, gaps and support needs

Taking the SNC as the starting point, the TNC/BUR will bring this component up-to-date, including both reported and new data and information, institutional arrangements, other relevant information, and constraints, gaps and support needs.

The chapter on national circumstances contains geographic, climate, population, education and human health information. It provides an explanation as to the political structure and legal and institutional framework in place. It also characterizes fundamental economic aspects and includes information on agriculture, land use and forestry activities, water resources, transport, industry, services, energy, biodiversity, coastal areas, and the state of the environment, with special emphasis on compliance with adaptation and mitigation measures. It shows the impact of the implementation process of the Economic and Social Policy Guidelines of the Party and the Revolution under the national strategy to address climate change.

The information, data and characterization under this component will prioritize inputs that are relevant to other components in the national communication.

Regarding other relevant information, the guidelines for the preparation of national communications from Parties not included in Annex I to the Convention (Decision 17/CP.8 of the Conference of the Parties to the UNFCCC) encourage such Parties to facilitate, when appropriate, information on the measures adopted to integrate climate change considerations into relevant social, economic and environmental policies and measures, under Article 4, paragraph 1(f), of the Convention. This information should include activities relating to: transfer of technology; systematic observation and research; education, training and public awareness; capacity-building; and information and networking. The TNC/BUR will cover all aspects established in these guidelines, namely: policies, strategies and programmes; transfer of technology; education and public awareness; systematic observation and scientific research; capacity-building and south-south cooperation; public information and networking. These aspects will be updated in accordance with the information contained in the SNC.

This output will be developed in the TNC/BUR using the document put together by the Consultative Group of Experts (CGE) on national communications from Parties not included in Annex I, entitled "Template on cross-cutting themes in national communications from Parties not included in Annex I to the Convention."

Transfer of technology

Within the framework of the SNC, a first preliminary evaluation of the national capacity for the transfer of technology associated with climate change was conducted for both mitigation and adaptation. The preparation of the TNC/BUR will involve updating the progress made in the transfer of technologies relevant to climate change and to capacity-building for their assessment, including market identification and proposed action plan for implementation.

Systematic observation and research

This project component will cover an update of the state of the climate observing system in the national territory, using the information contained in the SNC, under a participatory process that will involve all institutions that conduct climate and related systematic observations, including early warning systems in place. Where appropriate, the indications generated by the Global Climate Observing System (GCOS) will be used to provide guidance.

Bearing in mind the dynamics of scientific research in the country, the activities implemented will be updated, with the baseline taken from the information reported in the SNC. The analysis of national research programmes of importance to climate change will make it possible to report research findings that contribute, either directly or indirectly, to a better understanding of this phenomenon and to capacity-building for assessing its interaction with other environmental changes, their impacts, and the response actions connected with mitigation and adaptation.

Education, public awareness and training

Detailed information on the progress made towards incorporating climate change issues into the different levels of education and the training of professionals will be included. Climate change issues discussed at public awareness-raising activities will also be integrated into the TNC/BUR.

For the preparation of the SNC, an education, training and communication programme was developed to ensure the active participation of various population sectors in solving problems and adopting good environmental practices related to climate change. This is part of the efforts made by the country to implement the Doha Work Programme and Article 6 of the UNFCCC (Decision 15/CP.18). Its implementation will now be reviewed and updated under a broad participatory process that will involve all sectors related to education and awareness. Just as for the FNC and the SNC, the TNC preparation process will provide a major opportunity to train human resources, disseminate knowledge on climate change, and build capacities to ensure the sustainability of climate change related actions.

Information and networking

To guarantee sustainability in the preparation of biennial reports and national communications under an uninterrupted cycle, there is a need to obtain financial resources from international sources for institutional strengthening in support of the groups in charge of this process. They resort to networking for each key component of the national communication.

To this end, networking covers the three main components: greenhouse gas inventory, climate change mitigation, and vulnerability, impact and adaptation, and ensures process continuity. The TNC/BUR will further strengthen networking in the country.

The tasks to be undertaken under the TNC/BUR process include enhancing the webpage www.cambio.climatico.cu, providing the technical support required for increased availability of information on climate change, and facilitating information-sharing at the national and international levels.

Finally, constraints and gaps in connection to financial, technical and support needs will be identified for the development and implementation of climate change mitigation and adaptation measures.

The following activities are planned:

- Identifying financial, technical and capacity needs for climate change mitigation and adaptation.
- Identifying constraints for the implementation of climate change mitigation and adaptation measures.
- Preparing documents.

Component 2. GHG inventories

Within the framework of the FNC and the SNC, national greenhouse gas emission and removal inventories (INERGEI) were carried out for 1990, 1992, 1994, 1996, 1998, 2000, 2002, 2004, and 2006. Recalculations were also conducted for the following periods: 1990-2002, 1990-2004, and 1990-2006, including implementing new methodologies and estimating emission factors in some categories of sources under the conditions of Cuba. Direct and indirect greenhouse gas emissions were determined in the following sectors: energy, industrial processes, use of solvents and other products, agriculture, land-use change and forestry activities, and wastes. The TNC will include information on 2016, and the first BUR will provide an update of the GHG inventory in the 1990-2016 period, based on the 1996 IPCC Guidelines, introducing elements of the 2006 Guidelines.

For the preparation of the GHG inventory report, the capacity that has been built will be used. It is based on the work done by a multidisciplinary technical team (ETGEI) coordinated by the Institute of Meteorology (INSMET) under the umbrella of the Ministry of Science, Technology and Environment (CITMA). The ETGEI is made up of two main working groups. The first one is based at INSMET, and it is composed of experts on sources of pollution, air chemistry and climate, and oversees methodological activities, the determination of key categories, the development of databases, the calculation of emissions and uncertainties, and the preparation of the final performance report. The second group is integrated by experts from various agencies and institutions that are associated with different inventory modules. It is involved in the provision of specialized sectoral information, and estimates emissions under several categories.

The database for the estimation of the GHG inventory comes from the statistical yearbooks developed by the National Office of Statistics and Information (ONEI)

and from different ministries and central state agencies that provide a platform for permanent update of GHG inventories in Cuba.

The INERGEI structure will consist of six modules that have been developed during previous inventories. It will have a chapter dedicated to uncertainty evaluation and quality control and assurance, and other sections and information of interest, including the determination of key sources.

To develop this component, national experts will take part in training workshops on the 2006 IPCC methodologies for the quantification of GHG emissions in different sectors and for capacity-building in various agencies to collect activity data that are necessary to fill information gaps.

Quality improvement works for the GHG Inventory will be continued and focused on the methods and approaches for data collection process, filling data gaps and supporting establishment of a sustainable system for developing GHGI.

Component 3. Vulnerability and adaptation

The TNC will review the impact of adaptation measures that are being implemented in the country under the National Programme to Address Climate Change and of other sectoral measures that are also being implemented. They are mainly related to land-use planning, rational use, protection and conservation of natural resources, and environmental services of ecosystems.

The TNC will pay special attention to climate scenarios on a temporal scale that will be as close as possible to the present (2030). The idea is to facilitate the implementation of adaptation measures. The analysis of climate variability and change will focus on evaluating processes that regulate climate variability, the behaviour of climate extremes, and the analytical methods used for climate change detection and attribution.

On the sectors covered by the SNC (water resources, coastal areas and marine resources, biological diversity, agriculture, human settlements and land use, forests, and human health), the analysis will cover specific aspects that have not been assessed yet (i.e. water integrated management, relationship water coastal ecosystems; new cultivars as beans) as well as the progress made in the implementation of adaptation measures and their results. New sectors like tourism will be incorporated. As part of the climate change vulnerability and impact assessment, case studies will be developed and integrated analyses will be conducted.

The TNC will pay special attention to the integrated approach to impact and adaptation; water availability, management and protection; food security; damage caused by rising sea level; and ecosystem goods and services. Most of these studies will be undertaken within the framework of national science programmes, especially the one on climate change impact in Cuba.

Component 4. Mitigation

The Second National Communication covered three scenarios: a baseline scenario, a mitigation scenario that integrated all mitigation options identified and assessed in

various economic sectors, and an alternative mitigation scenario that involved the intensive use of renewable sources of energy (RSE) and featured implications on costs, energy efficiency, and resulting GHG emissions. The RSE potential that has been identified in the country is maximized, mainly that of biomass and photovoltaic and wind energy, to meet the same electricity demand as in the mitigation scenario.

A total of 35 mitigation options were assessed in the following sectors: residential, electricity generation, transport, industry and agriculture, forestry activities, and wastes. For this purpose, consideration was given to the results presented in the FNC and the 2002 greenhouse gas emission and removal scenario, along with the preliminary values that had been reported in the inventory for 2004. In these options, the estimated mitigation potential (baseline emissions minus mitigation) is in the order of 715 million tons of CO₂eq, while by 2050 the reduction will be around 40 million tons of CO₂eq, as compared to the baseline scenario.

The TNC/BUR will describe, analyze and assess the mitigation measures under implementation in the country, mainly those related to energy efficiency, the use of renewable sources of energy, and reforestation.

The mitigation study will involve an in-depth review of GHG reduction options in the SNC and the scenarios that were developed. It will extend them until 2060. It will also assess low emission options that include measures to improve energy efficiency, fuel replacement, use of efficient technologies, better sinks, and conservation options.

Under the FBUR, an appropriate MRV system will be proposed for national mitigation actions. This includes:

- An assessment of options and possibilities to develop a domestic MRV system
- Proposals of the bases for institutional arrangements and the national MRV framework.
- Requirements and recommendations for development of institutional mechanisms for national MRV.
- Compilation and approval of the section on domestic MRV system for the FBUR incorporation

Component 5. Compilation and submission of the TNC and the BUR, Monitoring and Evaluation

Main objective: Compile and submit the TNC and the BUR

All the studies conducted within the framework of the TNC/BUR will be included and compiled in a document to be published in the country and to be submitted to the UNFCCC.

This component includes the following activities:

- Studies conducted for the TNC and the BUR.
- Compilation, drawing-up, translation and publication of the TNC and BUR.
- Submission of the TNC and BUR to the UNFCCC, public launching, and distribution of copies to stakeholders.
- Project financial and progress reports prepared and submitted according to

	<p>M&E requirements</p> <ul style="list-style-type: none"> • End of Project report and lessons learned compiled.
<p>D. DESCRIBE, IF POSSIBLE, THE EXPECTED <u>COST-EFFECTIVENESS</u> OF THE PROJECT:</p>	<p>The TNC/BUR project will help honour the commitments assumed by Cuba to the UNFCCC. It will enhance the capacity of the country to develop and measure GHG emission scenarios and identify the most vulnerable sectors, thereby contributing to improve the National Programme to Address Climate Change thanks to the development and implementation of work programmes on inventories, implementation and evaluation of mitigation and adaptation measures, capacity-building, education and awareness. The TNC/BUR will make effective use of the gender and generational approach.</p> <p>This will also help increase cost-effectiveness in national programmes that integrate the country strategy to address climate change, particularly the energy programme that includes the use of renewable sources of energy, as well as food security programmes, and those related to increased utilization of ecosystem services, water saving, protection and conservation, and development of climatically intelligent agriculture. At the same time, this project will help set country priorities on climate change research and formulate prevention and sectoral adaptation policies.</p>
<p>E. DESCRIBE THE BUDGETED M&E PLAN:</p>	<p>The project will be monitored through the following M&E activities:</p> <p>Project start: A Project Inception Workshop will be held within the first 2 months of project start with those with assigned roles in the project organization structure, UNDP country office and, where appropriate/feasible, regional technical policy and programme advisors as well as other stakeholders. The Inception Workshop is crucial to building ownership for the project results and to plan the first year annual work plan. An Inception workshop report is a key reference document and must be prepared and shared with participants to formalize various agreements and plans decided during the meeting.</p> <p>Quarterly: <ul style="list-style-type: none"> • Based on the initial risk analysis submitted, the risk log shall be regularly updated in ATLAS. Risks become critical when the impact and probability are high. Note that, for UNDP-GEF projects, all financial risks associated with financial instruments such as revolving funds, microfinance schemes, or capitalization of ESCOs are automatically classified as critical on the basis of their innovative nature (high impact and uncertainty due to no previous experience justify classification as critical). • Based on the information recorded in Atlas, a Project Progress Reports (PPR) can be generated in the Executive Snapshot. • Other ATLAS logs can be used to monitor issues, lessons learned, etc. The use of these functions is a key indicator in the UNDP Executive Balanced Scorecard. </p> <p>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. <u>Day-to-day monitoring of implementation progress</u> will be the responsibility of the Project Coordinator, Director or CTA (depending on the established project structure) based on the project's Annual Work plan and its indicators. The Project</p>

	<p>Team will inform the UNDP-CO of any delays or difficulties faced during implementation so that the appropriate support or corrective measures can be adopted in a timely and remedial fashion.</p> <p>End of Project: During the last three months, the project team will prepare a brief terminal report. This brief report will summarize the results achieved (objectives, outcomes, outputs), lessons learned, problems met, and areas where results may not have been achieved.</p> <p>Learning and knowledge sharing: Results from the project will be disseminated within and beyond the project intervention zone through existing information sharing networks and forums.</p>
F. EXPLAIN THE DEVIATIONS FROM TYPICAL COST RANGES (WHERE APPLICABLE):	N/A

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)
Enrique Moret Hernández	Director Department of International Relations	MINISTRY OF SCIENCE, TECHNOLOGY AND THE ENVIRONMENT	02/27/2017

B. CONVENTION PARTICIPATION

CONVENTION	DATE OF RATIFICATION/ ACCESSION (mm/dd/yyyy)	NATIONAL FOCAL POINT	
UNCBD	03/08/1994	DIRECTOR, DEPARTMENT OF INTERNATIONAL RELATIONS, MINISTRY OF SCIENCE, TECHNOLOGY AND THE ENVIRONMENT	
UNFCCC	01/05/1994		
UNCCD	03/13/1997		
STOCKHOLM CONVENTION	12/21/2007		
MINAMATA CONVENTION	DATE SIGNED (MM/DD/YYYY)	NATIONAL FOCAL POINT	DATE OF NOTIFICATION UNDER ARTICLE 7 TO THE MINAMATA CONVENTION SECRETARIAT
	N/A	N/A	

C. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF policies ⁵ and procedures and meets the standards of the GEF Project Review Criteria for Climate Change Enabling Activity approval in GEF 6.					
Agency Coordinator, Agency name	Signature	Date (Month, day, year)	Project Contact Person	Telephone	E-mail Address
Adriana Dinu UNDP/GEF Executive Coordinator		April 28, 2017	Mr. Yamil Bonduki, Senior Program Manager, UNDP (Green- LECRDs)	+1-212-906- 6659	Yamil.bonduki@undp.org

⁵ GEF policies encompass all managed trust funds, namely GEFTE, LDCF, and SCCF.